

AN EXAMINATION OF STUDENT PERCEPTIONS OF KNOWLEDGE
TRANSFER IN THE FIRST-YEAR COMPOSITION
EXPERIENCE

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ABSTRACT

Guided by four research questions, this mixed methods study examined students' perceptions of their ability to transfer skills learned in the first-year composition (FYC) course to the writing required in their reported majors, in other college courses, and in their vocations. In the quantitative portion of the study, the researcher administered pre- and post-semester composition surveys to capture differences in attitudes in four areas: students' abilities as writers, students' previous knowledge of writing, students' expectations of the FYC course, and students' expectations of using the knowledge in other courses and contexts. To determine whether there were significant differences in the findings, the researcher used paired-samples *t*-tests, descriptive statistics, and analysis of variance (ANOVA) tests. The results of the tests for Research Question 1 and for two items mapped to Research Question 3 revealed significant differences. These differences, along with areas where no differences were found, provided insight into students' perceptions of transfer.

In the qualitative portion of the study, analysis of students' responses to open-ended questions about their perceptions of transfer revealed emergent themes relevant to composition studies: a growing awareness of the conventions of academic discourse; preparation for collegiate and vocational writing; and self-improvement in specific areas of proofreading and editing. The responses of the students emphasized how they had used and how they intended to use the knowledge and skills learned in FYC in their other coursework.

Several important recommendations for pedagogy emerged. Perhaps the most important recommendation is to equip instructors with teaching strategies that provide students with the ability to transform knowledge to useable skills. The researcher recommends the research be expanded to a longitudinal study following select students throughout their collegiate writing experiences.

DEDICATION

When I began this project in August of 2010, my son, Mitchell H. Beard, was fighting a war on the other side of the world. I knew I would need to occupy my mind as we waited for his return. I have dedicated my work to him because of the tasks he accomplished as a Marine and as a man. This is my tribute to him.

In April 2010, we received Mitch's first letter from Afghanistan. He described how he and his buddies spent their first week in country filling sandbags to build the Forward Operating Base (FOB) they would live in for the next six months. He also mentioned that he had volunteered to be a mine sweeper. He did not explain how dangerous this job could be, but his dad knew. In later conversations, his Marine buddies told us they felt they were in good hands with Mitch as their mine sweeper. When others asked to take his place, he would not allow it. In the months he led his platoon on patrols, he never lost a fellow Marine—a fulfillment of duty worthy of commendation.

He came home in May of 2012, but not wholly. Although he had no visible injuries, Mitch was wounded in ways we will never understand—wounds that can only be endured.

He rarely spoke of his time in combat; he was at times stoic and detached. He never liked the word hero or the zealous patriotism that civilians display at specified times of the year. He knew those who had not been in combat could never understand what he and his fellow warriors had seen or what they had been asked to do.

We glimpsed Mitch's suffering when we visited the grave of his fellow Marine who was lost in battle. Although the two young men grew up just miles from each other, they did not meet until they were in Musa Qala, Helmand Province. One June night in 2010, while their platoon was on patrol, a pack donkey stepped on an Improvised Explosive Device (IED), killing their friend. Mitch was about one hundred yards away when he heard the explosion. He knew what he and his buddies would be ordered to do: Because bees are drawn to blood, the Marines would follow the bees to find the scattered body parts of their comrade. Although these young men were grieving, they had to carry out this crushing task that very night—they wanted to send him home to his family. This young man was one of ten comrades who would die and seventeen who would be injured that deadly summer of 2010.

We stood with Mitch at the grave of his friend on Memorial Day 2012. As he wept, his body shook uncontrollably. He then kneeled to brush the grass and debris from his friend's grave marker. Ironically—or perhaps not—on Memorial Day 2014, Mitch was laid to rest, down the hill from his buddy. His suffering was over.

In the last scene of the heart-rending film *All Quiet on the Western Front*, a German soldier reaches out to touch a butterfly, to experience beauty in the midst of the misery of war. As he does so, he is shot and killed. This scene reminds me of my son. He was reaching out for what life had to offer—working in the family business, taking college classes, hunting and fishing with his dad, working out at the gym, rebuilding friendships—when he was cut down.

We mourn for the years he should have lived, yet we hold dear the 24 years, 9 months, and 6 days we had with him. He lived more in his short years than many who live to be much older. Mitch's ability to endure through times of pain and despair has given me strength to face each day without him. We have no choice but to go on—as he did.

2014 marked the 100th year since the beginning of The War to End All Wars. In September 1914, as the first British soldiers were brought home to be buried, the poet R. L. Binyon penned these words:

For the Fallen

They shall grow not old, as we that are left grow old:

Age shall not weary them, nor the years condemn.

At the going down of the sun and in the morning,

We will remember them.

We placed these words on our son's grave marker. His Marine buddies believe he would have liked it. He hated the idea of growing old.

I dedicate this project to you, Bub.

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Several of my colleagues must be mentioned. Sharon Ratchford has battled cancer for several years. You have inspired us all. Thank you especially to Ryan Bandy. You challenged me to press forward every step of the way. Beverly Kutz, former UTC reference librarian. Your attention to detail was the key to reworking my dissertation with EndNote. Yvonne Artis,

composition administrative assistant and dear friend. Your words of hope and faith have sustained me.

My father, David Blaser, educator and inspirational leader. Thank you for encouraging me through the analytical elements this project required. Your life has inspired me to take on herculean tasks, no matter the cost. My mother, Sharon Blaser, dedicated teacher. Your perseverance and love sustained me through this process. My grandmother, Velma Willett. Your quiet strength has inspired me through the years. Grandpa passed away nearly 30 years ago, but I will never forget how he overcame a life of struggle. Thank you for believing in me.

My daughter, Chelcee Beard, burgeoning teacher and creative spirit. It is difficult to express how much your words of encouragement have meant to me. Your determination to help others has inspired all who know you. Your time in the Dominican Republic proved to be a challenging yet enriching experience. After all that has happened, you have earned your undergraduate degree and have begun your teaching career. We, of course, are proud of you, but I am quite sure your brother is the proudest of all.

My husband, Steve Beard, entrepreneur and free spirit. After these many years, we know each other well—we both knew you would never proof one word of this paper. Yet, you listened when I was feeling low, supported me when twelve hours of work disappeared from my laptop, and encouraged me when the pain of loss was too great. This project may be coming to an end, but we will continue to pursue the task before us—loving one another. I am a better person for having known you.

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CHAPTER I

INTRODUCTION

Background to the Problem

Over the past century, the number of Americans earning undergraduate degrees within four to six years has grown substantially. The National Center for Education Statistics (2008) reported that “in 1910, only 2.7% of the population over the age of 25 had a four-year degree. By 2007, 29.6% of the same demographic had earned at least a bachelor’s degree.” In 2014 the number had increased to 34% (Statistics, 2015). What are these individuals seeking? To earn more money? To find a satisfying vocation? To be sought-after in the flooded job market? While these outcomes may support economic goals, our society needs objective thinkers who can use knowledge learned in the classroom to face challenges in the workplace and in everyday situations.

Yet, studies have revealed that college graduates are not necessarily better thinkers (Tsui, 2002), indicating that, in some cases, collegians have been taught merely what to think rather than how to think. Supporting the notion that higher education does not always encourage critical thinking, studies have indicated that “only a small proportion of four-year college graduates excel in these skills: 16 percent excel in written communication and 28 percent in critical thinking/problem solving” (Arum & Roksa, 2011, p. 143). This problem is not unique to our generation. In *The Lost Tools of Learning*, a lecture presented at Oxford in 1947, Dorothy L.

Sayers (1948) made the following indictment of the British educational system of nearly 70 years ago:

Is not the great defect of our education today--a defect traceable through all the disquieting symptoms of trouble that I have mentioned--that although we often succeed in teaching our pupils "subjects," we fail lamentably on the whole in teaching them how to think: they learn everything, except the art of learning. (p. 6)

Sayers (1948) concluded her lecture by articulating the sine qua non (i.e., essential element) of learning: "For the sole true end of education is simply this: to teach men how to learn for themselves; and whatever instruction fails to do this is effort spent in vain" (p. 23).

Drawing on the thoughts of Sir Richard Livingston, Sayers (1948) pointed up the dearth of thinking and the deficiency of knowledge transfer she identified in modern education:

I would draw your attention. . . [to] what the writer rightly called the "distressing fact" that the intellectual skills bestowed upon us by our education are not readily transferable to subjects other than those in which we acquired them: "he remembers what he has learnt, but forgets altogether how he learned it." (p. 6)

Paul (2005) described the ability to apply knowledge as "the art of thinking about thinking in an intellectually disciplined manner" (p. 28). Flores, Matkin, Burbach, Quinn, and Harding (2012) defined critical thinking as "the ability to see beyond simple facts and to think at a more comprehensive level," leading to "intentional consideration" (p. 213). What is lacking in contemporary education, according to Flores et al. (2012), is "the ability to take knowledge and transform it into uses that benefit not only the individual, but more importantly, society as a whole" (p. 213).

Essential for success in both college and the workplace are the skills of retention and transfer. Students must be able to retain what they learn but also transform what they recall into sensible and usable knowledge (Bransford, Brown, & Cocking, 1999; Detterman & Sternberg, 1993; Haskell, 2001; Mayer, 1995; McKeough, Lupart, & Marini, 1995; Phye, 1997). Yet,

studies focused on students' ability to transfer knowledge learned in their composition courses to other contexts have shown a lack of transfer (Driscoll, 2011; Haskell, 2001). This inadequacy comes at a great price to stakeholders: the students themselves, their families, the universities, the American taxpayers, and the workplace. A study conducted on American corporations recorded supervisors' ratings of the writing performance of entry-level public relations practitioners (Cole, Hembroff, & Corner, 2009). The supervisors demonstrated "a significant dissatisfaction" with their colleagues' writing skills, saying their writing was "bad" and "getting worse" (Cole et al., p. 10). In fact, at the time, "the estimated yearly cost of correcting business defects created by poor writing [was]. . . more than \$3 billion" (Cole et al., p. 11).

This crisis of ineffectiveness has challenged assessors of higher education to employ surveys, such as the Determinants of College Learning (DCL) and the Collegiate Learning Assessment (CLA), "to analyze core outcomes including critical thinking, problem solving, and writing" (Arum & Roksa, 2011, p. 122). By using the findings of these assessments, institutions and those who hold institutions accountable could take steps to eliminate the deficiency of "limited learning" (Arum & Roksa, p. 122), or learning that can be used in specific domains only. Designing course objectives that address knowledge transformation and educating instructors in best practices of learning transfer are strategies that could also be implemented.

To address this gap in the transference of skills, colleges and universities have offered first-year composition (FYC) as a general education course for decades. In fact, administrators have often placed the onus on FYC instructors "to provide students with functional literacy in academic prose" (Driscoll, 2011, p. 2) and "to prepare students for the writing they will do later—in the university and even beyond it" (Wardle, 2007, p. 65). If the course does not fulfill this goal, other faculty members must teach "basic writing strategies rather than advance

disciplinary writing skills or content” (Driscoll, 2011, p. 2). Nonetheless, according to some research, there is “no evidence that FYC facilitates such transfer” (Wardle, 2007, p. 65).

The goal of FYC is to train students to write in both academic and vocational settings. Many of these institutions have conducted studies to determine the effectiveness of these courses. In Fall 2013, the English Department of the University of Tennessee at Chattanooga (UTC) began a study for this purpose. The English Department was interested in studying the factors that promote the transfer of skills and knowledge acquired in FYC to other academic settings. The Director of Composition and the researcher of this study, who is a member of the English composition faculty at UTC, collaborated to design an instrument based on Driscoll’s (2011) study, hereafter referred to as Composition Surveys (2013-2014). The instrument measured students’ perceptions of their ability to transfer knowledge learned in FYC courses to disciplinary coursework and their attitudes toward themselves, their writing, and their educational environments.

For the departmental study, the Composition Surveys (2013-14) were conducted in three parts. First, the surveys were administered as pre- and post-semester tests to examine a sample of FYC students concerning how they perceived their ability to apply the knowledge learned in the course to other disciplines. Next, the datasets gathered from the surveys were then compared with the grades of the FYC students who took both the pre- and post-semester tests. Lastly, the data were examined to address the questions proposed by the departmental research team, which were similar to the guiding research questions proposed for this project.

For the researcher’s study, the data collection was twofold. After approval was granted from the Institutional Review Board (IRB), the researcher examined the first element of the study, the Composition Surveys (2013-14), to address the research questions of this study. For

the second element, the researcher conducted several focus group sessions. The responses were coded for content to further enhance the research questions of this study.

As an instructor of both secondary-level English composition and first-year collegiate rhetoric and composition, the researcher of this study has desired that her students view FYC not only as a requirement to fulfill but also as a skills-based course to enhance their abilities in written communication in a variety of situations. Some educational researchers have asserted that “the application of writing knowledge to other courses and contexts” (Fishman & Reiff, 2008, p. 1), or learning transfer, often proves daunting (McKeough et al., 1995). For this reason, transfer research in the field of composition leaves many opportunities for inquiry.

The factors associated with the inability to transfer knowledge are varied. Bruner (1966), the father of discovery learning, established links between students’ interest in writing and their ability to transfer knowledge. He maintained that “the purpose of education is to stimulate inquiry and skill in the process of knowledge acquisition, not merely to memorize a body of knowledge” (Bruner, 1966, p. 72). Bruner’s theories, including “knowing is a process, not a product” (as cited in Bruner, 1966, p. 72), formed the basis of later studies of self-perceptions and self-efficacy (Bandura, 1986). Other elements of transfer include self-reflective practices (or metacognition), abstract thinking or problem-solving strategies, and mindfulness or representation (Graham & Harris, 2000).

Building on the concepts of Bruner and Bandura, the Composition Surveys (2013-14) addressed two general areas. First, how do students’ perceptions about FYC courses contribute to their ability to transfer knowledge and skills to other areas? Second, what, if any, relationship exists between students’ grades and students’ ability to transfer learning?

Statement of the Problem

The history of transfer theory encompasses a variety of domains—the theory of identical elements (Thorndike, 1923), knowledge management (Wenger, 2004), learning theory (Perkins & Salomon, 1992), the dispositional view of transfer (Bereiter & Scardamalia, 2010), activity theory (Engeström, 2001), and formal transfer theory (Tuomi-Grohn & Engestrom, 2003). These perspectives have influenced how theorists study transfer, how the workplace emphasizes knowledge management, and how educators teach to support transfer. This study delineated each of these areas of transfer theory; however, the learning theories associated with the transfer of writing skills were of particular importance.

Compositionists (i.e., those who study and teach composition theory) have questioned whether the curricula of FYC have any measurable influence on the writing students may be required to produce in other courses (Crowley, 2002; Freedman, 1995; Russell, 1995). In fact, some have argued that no substantial benefit can be obtained from the instruction of writing skills (Petraglia, 1995). This controversy has prompted researchers at various institutions to examine the ability of students to transfer knowledge learned in FYC (Beaufort, 2007; Downs & Wardle, 2007; Driscoll, 2011; Fishman & Reiff, 2008; Roser, 2010; Smit, 2007). As Bruner (1968) suggested, to “understand. . .deep structures and general principles,” students must recognize similar features in disparate writing contexts and tasks in order for the transfer of writing skills to be successful (Driscoll, 2011). Driscoll (2011) demonstrated what similar studies have found: the failure rather than the success of transfer from FYC to other contexts. The decline of students’ beliefs about the possibility of transfer from the beginning to the end of the semester has raised questions about the effectiveness of pedagogical methodologies in FYC.

This study may enhance the educational community's understanding of transfer by analyzing how self-ratings or self-perceptions of students may relate to their ability to transfer the knowledge learned in FYC to other learning situations. The findings of the study may also be used to enhance instructors' awareness of the issue of transfer and their knowledge of how to teach to transfer.

Purpose of the Study

Those who teach FYC have a particularly heavy stake in the issue of learning transfer. Instructors must ensure their students not only master skills that enable them to write at an acceptable academic level in their FYC course but also apply the knowledge to other learning contexts. Halpern and Hakel (2003) found that "very little, if any, formal training [of instructors] addresses topics like adult learning, memory, or transfer of learning" (p. 37). Applying these observations to cognitive, organizational, and educational psychologists, who focus on issues related to the principles of learning and performing, Halpern and Hakel (2003) discovered little evidence that content experts in the learning sciences apply the principles they teach in their own classrooms.

Concern about the problem has shifted from institutions of higher learning to the workplace. According to Bauerlein (2008), many college graduates had not exhibited the skills emphasized in FYC in the workforce. This deficiency indicated an inability of students to transfer strategies taught initially in the composition classroom to other contexts or a lack of knowledge concerning the skills and objectives of the course (Bauerlein, 2008).

In this study, the researcher analyzed the dataset of the existing Composition Surveys (2013-14), developed initially as a departmental study. These data could be used to inform how

composition pedagogical and assessment practices are designed. To inform the research of this study, the researcher has synthesized the transfer theories of Salomon and Perkins (1989), Wardle (2009), and Driscoll (2011).

Guiding Research Questions

The purpose of the Composition Surveys (2013-14) was to gather data regarding students' personal evaluations of their writing ability and their ability to transfer knowledge learned in FYC to other writing contexts. For the purposes of this study, the following research questions guided the researcher:

1. What is the relationship between students' judgments about their writing and their perceived ability to use those strategies in other courses and contexts?
2. How do first-year students rate their ability to transfer knowledge about writing from the FYC course to other courses and contexts?
3. Do students' ratings of their ability to transfer learning change from the beginning of the FYC course to the end of the course (one semester)? If so, in what direction?
4. Based on their reported major areas of study, is there a difference in students' perceived ability to transfer writing knowledge from FYC to other courses and contexts?

Rationale for the Study

The rationale for conducting this study was based on the gap in literature that examines how students rate their ability to transfer learning to other contexts. Educational researchers (Driscoll, 2011; Smit, 2007) have contended that there is a dearth of research focused on best

practices of writing as they relate to transfer of knowledge. Driscoll (2011) concluded that very little knowledge is transferred from FYC courses to other courses and contexts; in fact, few empirical studies demonstrate positive results of students' ratings of their ability to transfer. By culling data from the existing Composition Surveys (2013-14), this study provided crucial information to this regional university's knowledge of students' perceptions of the FYC course, which, in turn, could enhance pedagogical practices in the composition program (Driscoll, 2011; Driscoll & Wells, 2012). The subsequent qualitative dataset, employing an ethnographic research approach, provided an informal setting for students to share their attitudes concerning metacognition, dispositions, and level of self-efficacy.

Approval Process for the Study

The proposal was submitted to the researcher's dissertation committee in March 2014. After the proposal was approved by the committee, the researcher was granted permission from the institution and the department chair to use the data gathered with the Composition Surveys (2013-14) to address the research questions. The researcher was also granted permission from the Institutional Review Board (IRB) to conduct the focus group sessions (see Appendix A).

Theoretical Framework of the Study

Central to the framework of this project was the desire to enhance meaningful learning by researching students' judgments of their ability to transfer learning from FYC to other contexts. Salomon and Perkins (1989) asserted that "transfer-related findings are often difficult to interpret and puzzling in the light of contradictory findings" (p. 114). In their research of the history of transfer, Marini and Genereux (1995) found many instances of failure. Given this ambiguous

research history, clarifying research is needed. Wilson (2009) asserted that the transfer of learned knowledge and skills should be “considered. . .a fundamental goal of education” (p. 5). Theorists in the field of corporate and industrial training (Aldridge & Tuckett, 2006; Evans & Donnelly, 2006) are also keenly interested in the transfer of skills because business and industry have invested heavily in occupational training and re-training of personnel. According to these theorists, employers consider “acquiring transferable knowledge and skills by employees an important component of a learning economy” (Aldridge & Tuckett, 2006; Evans & Donnelly, 2006).

The early principles of behavioral learning theory, explored by Ebbinghaus (1885), Thorndike (1898), and Skinner (1938), laid much of the theoretical foundation for the study of knowledge management in the workplace and in learning theory in composition and other contexts. In later years, theorists Singley and Anderson (1989) conducted research on transfer that “redefined [Thorndike’s] identical elements as the units of declarative and procedural knowledge in the Adaptive Control of Thought theory (ACT)” (p. 248). While arguing against the occurrence of general transfer, Singley and Anderson (1989) demonstrated that “transfer depends on the shared properties of creative activities” (p. 248).

Other influential theorists include Salomon and Perkins (1989), who based their theories on Bandura (1971b) and other cognitivist theorists. They held that a distinction must be made between the terms learning and transfer: “Mere learning occurs when previous learning affects subsequent performance on the same task. . . whereas transfer occurs when previous learning affects subsequent performance on a different task” (Salomon & Perkins, 1989, p. 115). This distinction clarifies the importance of the transformation of knowledge, specifically, that transfer is a higher cognitive function than mere learning.

Significance of the Study

The goal of this study was to gather information that may be used to determine how FYC students rate their ability to transfer the knowledge learned in the composition classroom to other courses and situations. First of all, this study has been of particular interest to the UTC composition faculty, from whose study the dataset was taken, as it may offer them crucial data to design writing programs that prepare students to write more effectively in all disciplines. In addition, this information may provide valuable data concerning student beliefs about the ability to transfer knowledge from FYC to other contexts. This dataset could also influence instruction and assessment of writing at other four-year colleges and universities.

Definition of Terms Used in the Study

The following terms have been defined as they are used solely for this study:

Active Transfer: Students' inclination to search for others' ideas and perspectives (Bransford & Schwartz, 1999).

Cognitive Rhetoric: Field of research that attempts to understand how writers think while they are writing (Tarvers & Moore, 2003).

Communities of Practice: A collection of people who engage on an ongoing basis in some common endeavor (Eckert & McConnell-Ginet, 1992; Wenger, 2000).

Composition: Courses that place a strong emphasis on writing and verbal skill content; "structured around writing but also incorporate literature, media, and other types of communication in class content" (Hughes, 2009, p. 8).

Compositionist: One who studies and teaches composition theory (term first used in 1985); "The compositionist mode of approaching writing instruction is to offer students an ever-increasing variety of skills and abilities, such as writing correctly, organizing logically, communicating vividly and sincerely, and adapting sensitively to the conventions of discourse communities, particularly the academic" (Bizzell, 1997, p. 5).

Critical Thinking: "The art of thinking about thinking in an intellectually disciplined manner" (Paul, 2005, p. 28).

Curriculum: Topics, lesson plans, and directives taught in a classroom provided by schools and school districts (Marsh & Willis, 2003).

Discourse Community: “A grouping of people who share common language norms, characteristics, patterns, or practices as a consequence of their ongoing communications and identification with each other” (Bazerman, 2012, p. 1). In the writing domain, the term has been used to point out that different academic collectives write in characteristic registers and genres (Bazerman, 1994; Bizzell, 1992).

Expressivist Rhetoric: A composition theory in which the individual writer is the center of attention (Tarvers & Moore, 2003).

Far Transfer: Learning that demonstrates the transferring of ideas to seemingly unrelated contexts (Perkins & Salomon, 1992).

First-Year Composition (FYC) or First-Year Writing (FYW): The acronym FYC will be used throughout this paper.

Genre: “Dynamic rhetorical forms that develop from responses to recurrent situations and serve to stabilize experience and give it coherence and meaning” (Berkenkotter & Huckin, 1993, p. 479); the form of presentation (e.g., letter, book, essay, pamphlet, blog, wiki, etc.).

High Road Transfer (Mindful): Learning that engages with abstract ideas and explores potential connections (Perkins & Salomon, 1992).

Learning: “A relatively permanent change in the ability to exhibit a behavior; this change occurs as the result of successful or unsuccessful experience” (Klein & Mowrer, 1989, p. 2).

Learning Transfer: “To say that learning has occurred means that the person can display that learning later” (Perkins & Salomon, 1996, p. 423); In the field of composition, the term refers to “the application of writing knowledge to other courses and contexts” (Fishman & Reiff, 2008, p. 1).

Learning by Unreflexive Practice: This learning process is indicated by writing improvement that occurs arbitrarily (Jarratt, Mack, Sartor, & Watson, 2009).

Low Road Transfer (Reflexive): Learning that requires patterns of response that are prompted by similar motivational conditions (Perkins & Salomon, 1992).

Meaning-Making: Constructing knowledge through “interpretive interactions with reading and writing” (Bird, 2009/2010, p. 2).

Meta-Awareness: A term used interchangeably with meta-consciousness; “the explicit awareness of the content of consciousness (Schooler, 2002, p. 339); the mental process of analyzing

our own thinking; awareness of our awareness; observing the dynamic interactions that make one aware of how to approach a writing problem.

Metacognition: “Cognition about cognitive phenomena, or thinking about thinking” (Flavell, 1979, p. 906); “awareness of one’s own thinking, awareness of the content of one’s conceptions, an active monitoring of one’s cognitive processes, an attempt to regulate one’s cognitive processes in relationship to further learning, and an application of a set of heuristics as an effective device for helping people organize their methods of attack on problems in general” (Hennessey, 1999, p. 3).

Near Transfer: Learning that is “triggered by routine contexts in which one can perceive similarities to the original learning context” (Perkins & Salomon, 1992, p. 25).

Negative Transfer: Learning in one context “negatively influences performance in another” (Perkins & Salomon, 1992, p. 3).

Non-Transfer: No evidence of learning has been demonstrated; learner believes s/he has learned nothing that could be called upon in other writing situations (Jarratt, Mack, Sartor, & Watson, 2007).

Positive Transfer: Learning in one situation “encourages achievement in another situation” (Perkins & Salomon, 1992, p. 3).

Reliability: The degree to which a variable can be measured consistently (Creswell, 2007).

Rhetoric: “An ability, in each particular case, to see the available means of persuasion” (Aristotle, 350 B.C.E./1984, p. 24); the art of effective persuasion (i.e., verbal, visual, or written).

Rhetorical Grammar: The situation (topic, purpose, and audience) that affects one’s writing; choice and arrangement of words (Berke, 1976).

Rhetorical Situation: The situation that evokes the production of a text and includes topic, audience, and purpose (Bitzer, 1992).

Self-Efficacy: The expectation that an individual can accomplish specific behaviors necessary to produce a desired outcome (Bandura, 1986).

Simple Learning Transfer: “Requires little or no effort to apply what has been learned in one situation to a new situation” (Leberman, McDonald, & Doyle, 2006, p. 4).

Thirdspaces: The distance between general education courses and the information skills required for courses in students’ disciplines (Grego & Thompson, 2008).

Transfer-Focused Thinking: Anticipating connections to future contexts, prior knowledge, using knowledge and skills (Driscoll, 2011).

Transfer of Skills: Term used by industry, social science, and education for the cognitivist term learning transfer.

Transformative Learning: “The process of effecting change in a frame of reference” (Mezirow, 1991, p. 5).

Validity: “Measuring what is intended to be measured” (Matthews & Kostelis, 2011, p. 184).

Methodological Assumptions of the Study

For the purposes of this study, the researcher made the following assumptions:

- The first-year students surveyed adequately represented other first-year students.
- The students surveyed gave honest answers on their surveys.
- Most English instructors teach Rhetoric & Composition using similar course objectives and major assignments.
- The researcher could gain access to all available information in a usable form.

Delimitations of the Study

For the purposes of this study, the following delimitations were established:

- The dataset used in the Composition Surveys (2013-14) was developed and made available by the university that employs the researcher, making it, in effect, a sample of convenience. The sample may not be directly generalizable to other locations.
- The surveys were delimited by a particular time frame. The time frame for the study was delimited similarly.
- The surveys used a sample delimited to FYC students at the designated university. The sample of the study was delimited similarly.

- The surveys used a sample delimited to FYC courses with a total enrollment of no more than 500 students. The sample enrollment for the study was similar.
- The methodology of the surveys was delimited to quantitative data collection approaches. The study was delimited by the existing quantitative dataset but also extended these data by the addition of a qualitative element.
- The surveys and the current study were delimited to English-speaking participants.
- The library resources used by the surveys and for the study were delimited to those who could be accessed on the databases and by inter-library loan (ILL) of the institution's library.
- The Literature Review for the surveys and for the study included sources written only in English; no sources written in foreign languages were considered for either review.

Limitations of the Study

For the purposes of this study, the following limitations applied:

- The Composition Surveys (2013-14) were limited by the number of students who chose to participate in the surveys. The study was also limited by those who chose to participate.
- The results of the Composition Surveys (2013-14) relied on self-reported data, or students' ratings of their ability to transfer, rather than on an external transfer measurement tool. The results of the study relied on self-reported data as well.
- The researchers who developed the Composition Surveys (2013-14) could not assure the participants gave forthright answers on the surveys and during the focus group

sessions. Similarly, the researcher could not assure participants gave forthright answers.

- The results of the Composition Surveys (2013-14) may not be generalizable beyond the specific geographic area from which the sample was chosen. Likewise, the results of the study may not be generalizable.

CHAPTER II

LITERATURE REVIEW

There is no more important topic in the whole psychology of learning than transfer of learning. . . .Practically all educational and training programs are built upon the fundamental premise that human beings have the ability to transfer what they have learned from one situation to another. . . .The basic psychological problem in the transfer of learning pervades the whole psychology of human training. . . .There is no point to education apart from transfer. (Desse, 1958, p. 213)

The investigation of the learning process, spanning the past century, remains a critical subject today. Early learning theorists Ebbinghaus (1913), Thorndike (1923), and Skinner (1938) described the global theories of learning wherein traditional conceptualizations of the learning process were investigated. In the latter half of the 20th century, theorists Bandura (1962); Bruner (1966), and Kolb (1984) described specific principles of the learning process. Moving into a critical area of the learning process—that of transfer theory—theorists in organizational management and educational psychology also added to the development of current learning transfer studies by contributing to the research literature. Engeström (1987) and Salomon and Perkins (1989) delineated the various modes of transfer, laying the groundwork for teaching to transfer.

Later literature demonstrated that composition pedagogy should be informed by methods that emphasize students' metacognition to enhance cognitive growth and transfer. The review of the literature has established that studies focusing on the transfer of skills and learning are needed in the field of composition. This study contributes to the literature relating to English composition and the role transfer plays in pedagogical practices of FYC.

The Development of Learning Theory

In the latter part of the 19th century, Wilhelm Wundt, an experimental psychologist, introduced the science of learning, which he studied by asking participants to reflect on their thought processes (as cited in Bransford et al., 1999). The quantitative methodology of Wundt (1910) did not conform to the accepted values of quantitative science; as a result, his work was viewed as unreliable by some. His colleague, Hermann Ebbinghaus (1885), was the first to conduct experiments on human memory by using himself as the subject. Ebbinghaus proposed an associationistic model, based on the Aristotelian notion that ideas are connected by associating similar experiences, dissimilar experiences, and closeness in time and space (as cited in Wozniak, 1999).

The mathematical and methodological innovations demonstrated by Ebbinghaus (1885) brought learning and memory into the laboratory and set a standard for careful scientific work in psychology (as cited in Wozniak, 1999). Using what he called the savings method, Ebbinghaus became the first to describe the shape of the learning curve. His self-developed nonsense syllable test demonstrated that retention is affected by a variety of factors and can vary even when the material has been well-learned (as cited in Wozniak, 1999). Ebbinghaus concluded that meaningful memorization takes about one tenth the effort compared to that needed to memorize material considered nonsensical; the time required to memorize an average nonsense syllable increased sharply as the number of syllables increased (as cited in Wozniak, 1999). In addition, Ebbinghaus recorded that practicing material after the learning criterion had been reached enhanced retention (as cited in Wozniak, 1999). The research of Ebbinghaus provided a foundation for the literature of primacy and recency factors, rote learning, and retention.

The studies that followed were based on the associationistic framework accepted by most learning theorists in the form of functionalism (Guthrie, 1930; Hull, 1943; Pavlov, 1960; Skinner, 1938; Thorndike, 1913; Tolman, 1932). The work of Thorndike (1898) was instrumental in establishing the study of animal intelligence and learning. In his landmark findings, Thorndike (1898) placed cats and dogs in what he called puzzle boxes, in which he monitored their ability to escape from boxes sequentially. He found that the animals applied what they had learned to the next problem, thereby introducing the concept of generalization, or learning transfer. Thorndike (1898) concluded that the focus was on “the feeling of the doing” (p. 13), and that the act itself was “a secondary affair” (p. 13), indicating the disposition of the subject was of primary concern. He suggested an association between sensations and a “mechanical stamping in” of these associations (Thorndike, 1898, p. 13). The empirical contributions of his dissertation were crucial in the history of behavior analysis and provided a stepping stone for subsequent behavioral theorists (Hilgard & Bower, 1975).

In a three-year investigation of the psychology of learning, Woodworth and Thorndike (1901) raised important questions about the effectiveness of designing learning environments based on assumptions of formal discipline. Rather than developing some type of “mental muscle” that affected a wide range of performances (e.g., in the area of Latin studies), people seemed to learn quite specific features (Woodworth & Thorndike). The researchers explained that the mind is a machine that adapts itself to the data with which it has had experience. Improvements in any single mental function rarely bring about equal improvement in any other function, no matter how similar; for the working of every mental function group is conditioned by the nature of the data of each particular case.

Thorndike (1913) furthered the study of behavioral science by adding to the discussion of metacognition. He also challenged many of the prevailing assumptions concerning the transfer of learning. Most scholars agree that Thorndike was the first to study the process of learning in a systematic way (Chance, 1999). Thorndike demonstrated that, although individuals may do well when tested on specific content they have practiced, they may not transfer that learning to new situations, known as the specific transfer theory of identical elements (Woodworth & Thorndike, 1901). It must be noted that Gestalt psychologists, such as Katona (1940) and Wertheimer (1945), disputed the theory of the transfer of general skills.

Thorndike (1923) also examined the proposition that studies of Latin disciplined the mind for better performance in other subject matters. He concluded that transfer depended on identical elements in differing situations and that most situations were too different from one another for much transfer to be expected. Responses that precede a satisfying condition are more likely to be repeated than responses that precede an annoying condition—a theory known as the Law of Effect (Meehl, 1950; Skinner, 1968; Thorndike, 1913). Meehl (1950) questioned the empirical content of the law but concluded that it did, in fact, involve a reinforce. He reformulated the law by demonstrating that all reinforcers are trans-situational. The Law of Effect, however, could not account for the level of motivation needed to achieve a certain outcome (Meehl, 1950).

Building on the foundational conclusions of Thorndike, Skinner (1938) carried on the puzzle box experiments with Thorndike's approval. Skinner found that establishing a consequence called reinforcement would allow one to shape the behavior of an organism, namely, the pigeon. He declared this process as “seeing learning take place” (Skinner, 1938, p. 11). In these experiments, Skinner also established the importance of both re-enforcement (continuing long after the behavior was learned) and cooperation (rather than competition) to the

learning process. By training pigeons “to coordinate their behavior in a cooperative endeavor” (Skinner, 1968, p. 12), Skinner, it might be said, was portending the notion of communities of practice (Wenger, 2000).

Skinner (1968) recorded how he connected thinking to certain behavioral processes, including learning, discriminating, generalizing, and abstracting. These cognitive activities were the precursors of what learning theorists would later describe as skill transfer or transfer of learning. Skinner questioned the traditional ways of typifying learning and teaching. He believed that these modes “did not fully describe the contingencies of reinforcement under which behavior changes” (Skinner, 1968, p. 5). First of all, the learning-by-doing theory emphasized the active role a learner must play in the learning process. For centuries, the drill and practice rote method was a conventional practice to achieve learning by doing (Hilgard & Bower, 1975). The teacher who practices this method believes that, in exercising the student’s mind like a muscle, the student will become a stronger thinker. Skinner concluded that the assumption that learning results from continuing a practiced behavior was not only an over-simplification but also a characteristic of negative transfer. The act of the behavior is only the beginning of the learning process.

A second theory that Skinner (1968) revisited was that of learning-from-experience: Merely providing the student with experiences does not present ample connections for the student to learn the significance of the encounter. The student must connect the experience with doing. By generalizing the findings of the puzzle box experiments, Skinner (1968) correlated “experience” with stimulus and “doing” with response or output (pp. 6-7). This two-variable formulation provided the student with a means for mental action, thereby creating a pathway for constructing meaning.

Thirdly, Skinner (1968) re-evaluated conventional thought on learning through the trial-and-error theory. Skinner (1968) asserted that this theory, also recognized by the term reward-and-punishment, was flawed in its description of the role consequences of behavior play in producing positive behavior. The theory was based on the misconception that students will learn how to perform a task properly by performing it incorrectly numerous times. While we may indeed learn from our errors, it would be fallacious to argue that wrong behavior will ultimately result in proper behavior. Thorndike (1913) preferred to measure the results of these experiments by the revised phrase of “trial and accidental success” (as cited in Chance, 1999, p. 438), placing new emphasis on the role of actions and their consequences. While each of these theories informed the learning theory of the time, Skinner concluded that no single element of these theories should be studied without the others.

Perhaps more than other behaviorists of his time, Skinner (1968) was concerned with how we come to know ourselves or how we become aware of our feelings and what we are learning. This self-attribution, or self-awareness, demonstrates the importance of metacognitive activities to one’s ability to transfer learning from one person to the next. Skinner (1968) held that “a culture is no stronger than its capacity to transmit itself. It must impart an accumulation of skills, knowledge, and social and ethical practices to its new members” (p. 110).

Skinner discussed in detail this typical problem of learning. He used the word induction to describe what is commonly referred to as generalization in the field of conditioning. He asserted that the reinforcement of a response increases the probability of that response or similar ones to all stimuli containing the same elements—a notion closely tied to Thorndikean thought (Hilgard & Bower, 1975). Skinner’s theory of shaping through reinforcement has been articulated in the following six areas: immediate reinforcement, emitted behavior, gradual

progression to complex repertoires, fading or gradual withdrawal of stimulus support, control of observing (attentive) behavior, and discrimination training (abstractions; concepts) (Holland, 1960).

Another important principle adding to the literature is the Hull-Spence learning theory based on the drive reduction theory, which asserts that an intense internal arousal motivates unconditioned or acquired behavior (Hull, 1943). Hull believed the strength of the reinforcer influenced habit strength: the greater the reinforcement, the stronger the habit strength. Hull also held to the premise that behavior is an instinctive or mechanical response. Hull's theory was further developed by his student, Spence (1936), who conducted tests in which an animal was given an incentive to complete a maze. The responses demonstrated in these studies were broadly applied in the study of learning; however, some questions remained concerning response theory.

Another perspective of the mechanistic views of behavior was introduced by Tolman (1932). The expectancy theory demonstrated that behavior was "not an uncontrolled reaction but a purposive action accomplished by an individual able to make appropriate behavioral decisions based on the situation" (Tolman, 1932). The theory suggested that reward does not always necessitate learning. One study undermined the Hull-Spence theory of learning: rats allowed to explore a maze without reinforcements demonstrated a faster trial than those given reinforcements. Without reinforcement, the subjects not only learned but also constructed a cognitive map (Tolman, 1932).

Contemporary learning theorists have continued to build on the discoveries of the theorists of the past century. Their work has provided the foundation for much of the systematic experimentation and theorizing in current issues. These issues include the conditions of learning

that enhance or impede the ability of students to take what they have learned in one situation and transfer those skills and knowledge to novel situations.

Contemporary Learning Theories

Dewey (1922), Lewin (1946), and Piaget (1950) were influential in delineating learning models on which contemporary theorists, such as Freire and Kolb, would base their models. The theory of action research, one of Lewin's contributions, was "a reflective process of progressive problem-solving led by individuals working with others in teams or as part of a 'community of practice' to address issues and solve problems" (Lewin, 1946, p. 35). A specialization of one branch of action research is the theory of Participatory Action Research (PAR) (Freire, 1982). This instructional model emerged as a significant methodology for intervention, development, and change within communities and groups (Kolb, 1984). In contrast to traditional, formal models of education, PAR challenged the emphasis on teachers as purveyors of knowledge and students as passive recipients, effecting inestimable changes in pedagogical methodology.

Another important contribution to contemporary learning theory was Bruner's work *The Process of Education* (1960). In his study, the theorist examined the dilemmas associated with contemporary education. He delineated four features of instructional theory: predisposition to learn, structure of knowledge, sequence, and reinforcement. Bruner's (1960) adage aptly described his perspective: "Any subject can be taught effectively in some intellectually honest form to any child at any stage of development" (p. 33). He held that Piaget's emphasis on what children should learn failed to provide a sufficient description of how children solve problems (Bruner, 1966). In later works, he asserted that a theory of instruction should focus on "how

what one wishes to teach can best be learned, with improving rather than describing learning” (Bruner, 1966, p. 40).

The traditional theories of learning emphasized knowledge-building through reinforcement. Skinnerian (1938) behaviorists who held to the notion of learning by doing and cognitive psychologists who embraced the theories of Bandura (1969) continued to be divided. Social learning theory placed “special emphasis on the important roles played by vicarious, symbolic, and self-regulatory processes” (Bandura, 1971b, p. 2). This theory described human learning as a vicarious process, accomplished by observing others making skilled responses or by practicing activities such as reading or viewing pictures. The individual can then attempt to imitate the model response, an imprecise yet identifiable mode of transfer. Based on this model, the learner is able to perform novel responses at a later time without the benefit of having made the action before or having received reinforcement for the action. This observational learning, as Bandura referred to it, became the basis for his prolific work with young children (Bandura, 1962, 1965, 1969, 1971a, 1971b). Bandura observed that a child watching a person, or model, performing a particular act can later reconstruct, or mimic, the behavior displayed by the model.

Bandura and his colleagues analyzed aspects of observational learning and described several important differences between observational learning and the Skinnerian view of operant conditioning. In his work *Social Learning Theory*, Bandura (1971b) asserted:

Skinner’s analysis clarifies how a similar behavior that a person has previously learned can be prompted by the actions of others and the prospect of reward. However, it does not explain how a new matching response is acquired observationally in the first place . . . such learning occurs through symbolic processes during exposure to the modeled activities before any responses have been performed or reinforced. (p. 6)

Bandura established that observational learning requires four interconnected series of actions:

attention process, retention processes, motoric reproduction skills, and reinforcement—reinforcement being the concept held by most modern learning theorists. Social learning theory described the role contemporary learning theory could fulfill in solving practical problems.

Motivated by the training of service members for the Second World War, Gagné (1962) observed that the accepted principles of the psychology of learning as they pertained to “designing effective training situations” (p. 85) fell short in this context. He found that “practice, even under presumably favorable conditions, was not very effective” (p. 85). Learners, instead, had to learn what to look for, what had to be done, and what classes of situations were likely to be encountered. In order to accomplish these assessments, Gagné proposed that learning be divided into eight categories arranged in a hierarchy, each implying mastery of the other:

1. Signal learning
2. Stimulus-response learning
3. Chaining (requires 1 and 2)
4. Verbal association
5. Discrimination learning (requires 3 and 4)
6. Concept learning (requires 5)
7. Rule learning (requires 6)
8. Problem solving (requires 7)

These categories, outlined in *Heirarchical Theory of Learning* (1965), were based on Pavlovian, Thorndikean, and Skinnerian models of thought. The predisposition to organize and sub-categorize can also be seen in Gagné’s arrangement of school instruction and the desirable sequence characteristics associated with five types of learning outcomes: motor skills, verbal information, intellectual skills, attitudes, and cognitive strategies (Gagné & Briggs, 1974).

Piaget and Vygotsky, who laid the groundwork for the learning theory of constructivism, developed the epistemological study of the cognitive processes involved in constructing knowledge. Although the burgeoning theory of constructivism failed to explain the psychological factors connected with knowing (Airasian & Walsh, 1997), the theory has been

credited with introducing several notable features of pedagogical methodology. Initially, a dichotomy emerged between the former view of knowledge and the new constructivist view. From the former perspective, truth is housed outside the learner; the more truth one learns, the more knowledge one possesses (Airasian & Walsh, 1997). From the new perspective, knowledge is not independent of the learner; knowledge and meaning are constructed by the learner from existing beliefs and experiences (Airasian & Walsh, 1997). A construct was devised to explain that universal truths were nothing more than working hypotheses. Hence, right and wrong answers, good and bad writing, sound and poor decisions were no longer relevant.

The concept of using constructivism in the classroom received much attention in the latter part of the 20th century. A primary feature of constructivism was the notion that teachers no longer held the primary role of authority in the classroom (Piaget, 1950). Student-centered approaches to instruction allowed students to take more responsibility for their own learning through cooperative learning (Dewey, 1929; Kagan, 1994), discovery learning (Bruner, 1961), and self-regulated learning (Paris & Paris, 2001). These approaches emphasized creative problem-solving and critical thinking skills while also prompting metacognitive questions including

- What is knowledge?
- What is learning?
- Is objectivity possible?
- How is knowledge created? (Paris & Paris, 2001)

A precise definition of constructivism continues to be elusive; however, certain characteristics are evident. Piaget (1950) and Chomsky (1959) argued about innateness and

genetic programming but agreed that inquiries are framed by being “constructed.” Phillips (1995) proposed that “in sum, human knowledge—whether it be the bodies of public knowledge known as the various disciplines, or the cognitive structures of individual knowledge or learners—is *constructed*” (p. 5). The ways for acquiring and applying this constructed knowledge is the focus of constructivist theory (Schunk, 1991; Slavin & Davis, 2006).

Building on the constructivist model, Kolb (1984) developed the Model for Experiential Learning. Based on the Lewinian (1946) model, Kolb’s paradigm proposed that learning is “a tension- and conflict-filled process; that is, new knowledge, skills, or attitudes are achieved through confrontation among four modes of experiential learning” (1984, p. 30). As seen in Figure 2.1, effective learners need four disparate abilities: concrete experience, reflective observation, abstract conceptualization, and active experimentation. In essence, learners must be able to

1. reflect on and observe their experiences from many perspectives,
2. create concepts that integrate their observations into logically sound theories, and
3. use these theories to make decisions and solve problems. (Kolb, 1984, p. 30)

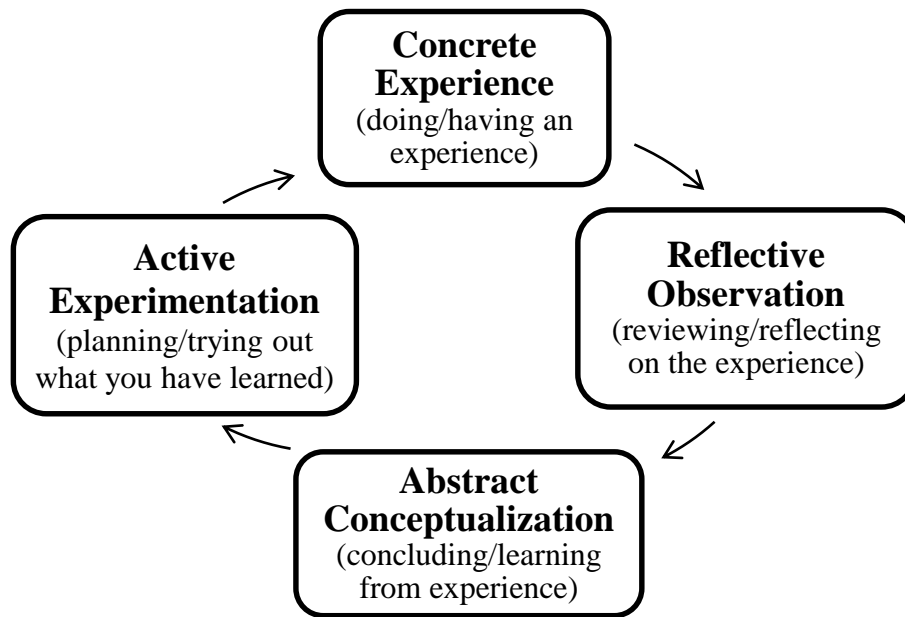


Figure 2.1 Kolb's Model for Experiential Learning

Kolb (1984) argued that “this complex movement from one dimension to the other, from actor to observer, from specific involvement to general analytic detachment” (p. 31) is the key to learning. Learning, then, is adaptation, a moving from childhood to adulthood, from the classroom to the workplace, from subordinate to leader. Through adaptation, Kolb (1984) maintained, “knowledge [becomes] a transformation process, being continuously created and recreated, not an independent entity to be acquired or transmitted” (p. 38). This process evokes the concept of praxis, defined as “reflection and action upon the world in order to transform it” (Freire, 1974, p. 36).

Basing his premise on the concept of learning as a transformational process, Wonacott (2000) pointed out that “activities should be active, self-directed, learner-centered, and collaborative.” Instructors should design instructional methods using “a variety of media to accommodate differences in modality, cognitive styles, and multiple intelligences” (Wonacott,

2000). With the use of these methods, the traditional role of the instructor as “lecturer or purveyor of knowledge” is transformed into “guide, facilitator, and coach” (Wonacott, 2000).

Confrey (1990), a researcher in the field of science and mathematics, asserted that teachers must attempt to match a model of how each student views an idea. In so doing, the teachers will help students restructure those views in ways that help them learn more efficiently.

Wonacott (2000) predicted that the constructivist concept of web-based training (WBT) would encourage learners to “construct meaning through self-directed inquiry, guided activity, and group collaboration.” In recent years, educators have implemented elements of web-based learning, believing that “interaction and cooperation. . .allow motivation, support, modeling, and coaching” (Feden, 1994). This type of learning has been associated with apprenticeship. Slavin and Davis (2006) emphasized that teachers who use constructivist pedagogical methods tend to encourage “more advanced students [to] help less advanced ones through complex tasks” (p. 259). The approaches implemented in constructivist classrooms include top-down processing, cooperative learning, learning together, discovery learning, self-regulated learning, scaffolding, problem-solving, and knowledge-creating.

The constructivist method of top-down processing emphasizes the idea of giving students difficult or complex problems and allowing them to discover the appropriate skills required to complete the task (Slavin & Davis, 2006). This concept contrasts with traditional education (bottom-up approach), in which students are taught skills initially then asked to solve problems using those skills. The principal elements of cognitive scaffolding—considering others’ ideas, collecting reactions on proposals, and discussing various solutions—informed higher-order learning outlined by Vygotsky (1962), Bruner (1966), and other constructivists (Slavin & Davis, 2006).

Another constructivist method is cooperative learning techniques, or “students work[ing] on learning activities in small groups and receiv[ing] rewards or recognition based on their group’s performance” (Slavin, 1980, p. 15). Several common cooperative learning methods include jigsaw, learning together, group investigation, and cooperative scripting. Research has deemed these approaches effective in the areas of increasing student achievement, positive race relations in desegregated schools, mutual concern among students, and student self-esteem (Slavin, 1980). As with all methods, cooperative learning has implications that could prove detrimental as well as beneficial. However, this method affords students with more educational choices than in a traditional classroom.

Constructivism includes the concept of learning together, developed by Johnson and Johnson (1999), in which students work on assignments in small heterogeneous groups. The best and worst element of this approach is that students submit a single completed assignment for one grade. Ideally, each member will contribute equally to the process. Another organizational plan is that of group investigation, a learning model in which students work in small groups using cooperative inquiry, group discussion, and cooperative planning and projects (Slavin & Davis, 2006). These methods have proven more effective to students learning and retaining than students reading or summarizing on their own (Newbern, Dansereau, Patterson, & Wallace, 1994).

The method of discovery learning, similar to self-regulated learning, encourages students to learn on their own through active involvement with concepts and principles. Bruner (1966), an early advocate of discovery learning, proposed the following:

We teach a subject not to produce little living libraries on that subject, but rather to get a student to think. . .for himself, to consider matters as an historian does, to take part in the process of knowledge-getting. Knowing is a process, not a product. (p. 72)

These approaches arouse students' curiosity and teach independent problem-solving and critical thinking skills (Slavin & Davis, 2006).

Self-regulated learning emphasizes cognitive strategies, metacognition, motivation, task engagement, and social supports in the classroom. Ideally, self-regulated learners will demonstrate an understanding of the basic of abilities of (a) breaking complex problems into simpler steps or to test alternative solutions, (b) being motivated by learning itself not only by grades or by the approval of others, and (c) employing intellectual perseverance to complete complex tasks (Schunk & Zimmerman, 2012; Slavin & Davis, 2006).

The construct of self-regulation dovetails with the socio-cultural theory, social learning theories, and information-processing theories of Vygotsky (1978); in that, an interacting social system exists between learners and their environment. After acquiring the skills needed for learning, learners can then focus on higher-level cognitive functions, specifically, conceptual thinking and problem-solving. Kopp (1982), building on Vygotsky's findings, demonstrated that self-regulated learners move from doing only what one is told to controlling one's own actions (i.e., internalization). Within this framework, the learner is considered the meaning-maker—the learner's personal knowledge becomes the goal of learning (Airasian & Walsh, 1997). It is understood, however, that the learner is influenced by the adult or teacher who initiated the learning.

Based on the Vygotskian concept of assisted learning, scaffolding is a practice that enables students to master and internalize the skills that encourage higher cognition. Vygotsky (1978) asserted that higher mental functions, including the ability to direct memory and attention in a purposeful way and to think in symbols, are mediated behaviors. Hmelo-Silver, Duncan, and Chinn (2007) posited that students need help “engaging in sense-making” (p. 101). For this

reason, teachers play a significant role in building, or scaffolding, meaningful learning experiences. The positive outcomes of this technique include producing life-long learners and adaptive thinkers as well as reducing cognitive load by making the task more accessible and manageable (Hmelo-Silver et al., 2007).

Within the constructivist model of knowledge creation, “real ideas” must address “authentic problems” (Bereiter & Scardamalia, 2010, p. 3). Knowledge does not have value simply because of its novelty but because of its effect on future knowledge creation—“productive knowledge”—not merely mastery (Bereiter & Scardamalia, p. 3). In the traditional sense, to “master concepts” means to achieve at least 80% on standard achievement tests (Bereiter & Scardamalia, p. 3). Yet, this mastery may not lead to using the information to produce new or meaningful knowledge (Bereiter & Scardamalia, p. 3). The constructivist approach emphasizes the notion that knowledge is only as productive as it is meaningful. Collaborative knowledge-building, reflective writing, and problem-solving activities can be “powerful ways of converting meaningful but inert knowledge into productive knowledge” (Bereiter & Scardamalia, 2010, p. 7).

Contemporary learning theory emphasizes problem-solving and knowledge-creating as essential elements of learning (Bereiter & Scardamalia, 2010). To help students internalize and self-motivate, instructors encourage students to ask questions about the learning process to determine an effective study environment (Bereiter & Scardamalia, 2010). By fostering metacognitive skills in students, teachers can enable them to acquire knowledge on their own and to transfer that knowledge to other domains (Slavin & Davis, 2006). The journey to produce meaningful and thoughtful learning has been informed by the search to produce learning that can be transferred to various and novel situations; thus, the quest for transferable knowledge has led

theorists into the workplace with the study of knowledge management (Wenger, 2000) and into the realm of education with the study of learning transfer (Perkins & Salomon, 1996).

Knowledge Management and Learning Transfer

While the science of behavior has long been associated with the concept of transfer, other fields of study have also been engaged in training learners to transform knowledge learned in one context into knowledge that can be used in new situations. To better understand how the study of transfer theory has developed, one must consider how the realm of organizational theory has informed this essential element of the learning process.

Knowledge Management

The literature on knowledge transfer, transfer of skills, or training transfer has its roots in a number of disciplines including psychology, education, management, and organizational behavior. Whether in the community or in industry, instructors who plan and implement programs for adults intend for what is taught to be learned and for what is learned to be transferred to other situations. Businesses spend a large portion of their yearly budget on training programs, yet statistics have shown that only about 10% of what is spent results in the transfer of knowledge, skills, and behaviors (Awoniyi, Griego, & Morgan, 2002).

Theorists in the Studies of Apprenticeship have focused on the issue of transfer to determine how to better prepare their apprentices for novel tasks, an essential tradecraft of business and education realms. The concept of learning and doing has for centuries been touted as the most effective learning practice. The master/student relationship, or the dyadic relationship, must be cultivated for higher order learning to take place. A similarity between

transfer in organizational theory and in educational theory can be found in the area of dispositions. Merriam and Leahy (2005) cited several studies that found a negative or non-supportive transfer climate acted as a barrier to transfer. A toxic environment worked against the cultivation of worker dispositions.

Developed by Lave and Wenger (1991), the notion of communities of practice (CoP) not only has informed the social theory of learning but also has become an important feature of the organizational landscape. In his influential work, Wenger (2000) defined communities of practice as “groups of people who share a concern or passion for something they do and learn how to do it better as they interact regularly.” Wenger and his colleagues addressed the variables that contribute to a “person-environment” that enhances learning and, therefore, transfer. Further research revealed that the global economy is connected to the ability to transform knowledge into compatible skills (Wenger, McDermott, & Snyder, 2002). Wenger (2004) asserted that communities of practice are the “social fabric of knowledge” (p. 1). He further explained, “Unless [leaders] are able to involve practitioners actively in the [knowledge management] process, [their] ability to truly age knowledge assets is going to remain seriously limited” (Wenger, 2004, p. 1).

A fundamental principle of knowledge management is understanding how the practitioner interacts with colleagues: “The practitioner, who uses knowledge in his/her activities, is in the best position to manage this knowledge; however, interaction with colleagues is needed to benefit from the stimulation” (Wenger, 2004, p. 2). The Doughnut Model of Knowledge Management (see Figure 2.2) is similar to situational leadership theory (Hersey, Blanchard, & Natemeyer, 1979), in which the situation determines the style of management: directive or supportive. Wenger (2000) maintained that “the forms of participation (learning, sharing, and

stewarding) contribute to the three modes of belonging: engagement, doing things together; imagination, constructing an image of ourselves; and alignment, a mutual process of coordinating perspectives, interpretations, and actions” (pp. 227-228). Based on this exemplar, instructors should avoid managing knowledge directly while engaging practitioners in the development or process of the practice.

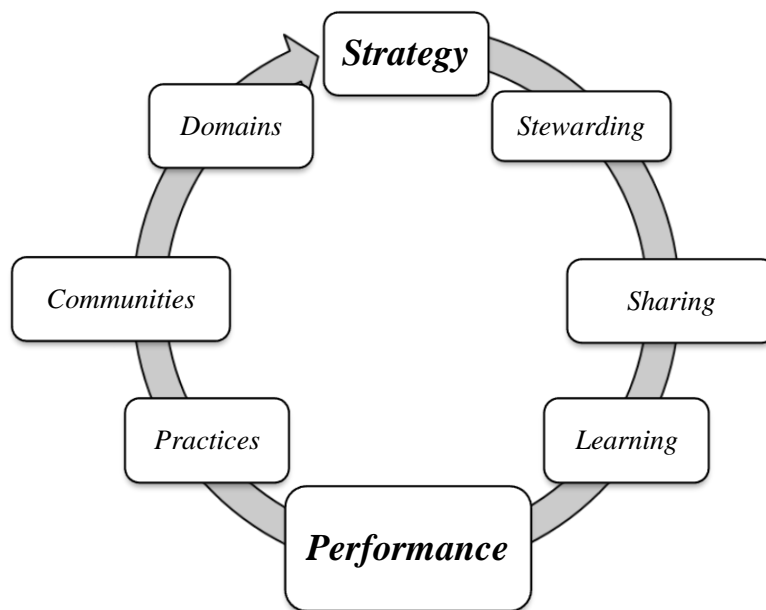


Figure 2.2 Wenger's Model of Knowledge Management

Lave and Wenger (1991) introduced the notion of situated learning, the idea that a skill is best learned, or can only be learned, in the situation in which it will be used. Brent (2011) suggested that the classroom is, perhaps, one of the most “unsituated” places, making the possibility of transfer less likely. Some studies associated with the transference of workplace knowledge are “skeptical of people’s ability to apply what they have learned in one activity system to the job at hand in another” (Brent, p. 401). A study by Freedman, Adam, and Smart

(1994) focused on students who were to give formal presentations as if they were in a workplace setting, the main difference being that the professor would be grading them on what they had learned rather than on how they would contribute to the business. The researchers concluded that this type of professionally oriented education may have a role in teaching one how to act and think in a particular vocation as well as teach the discourse used in that setting. The study, however, primarily showed that students had to re-learn many skills when they entered the workplace (Brent, 2011).

Another aspect emphasized in the study of knowledge management is the role that boundaries play in the social learning systems. By connecting communities and offering a variety of learning opportunities, boundaries can provide “areas of unusual learning,” “radically new insights,” and “a convergence between experience and competence” (Wenger, 2000, pp. 233-234). In so doing, members can “contribute their competence by participating in cross-functional projects and teams that combine the knowledge of multiple practices to get something done” (Wenger, p. 237). These “learning loops” can then be applied to new projects, creating a cycle of learning (Wenger, pp. 237-238). New perspectives invite new ways of thinking.

Wenger’s notion of boundaries can be compared to Meyer and Land (2005) threshold concepts. Turner (1969) described the area in which students find the learning of certain concepts difficult or troublesome as “liminal,” a term based on the Latin root “lemin,” meaning “boundary” or “threshold” (as cited in Meyer & Land, 2005, p. 375). To identify these “stuck places,” as Meyer and Land (2005) referred to them, one might “redesign activities and sequences, through scaffolding, recursiveness, provision of support materials and technologies or new conceptual tools, through mentoring or peer collaboration” (p. 377). These practices enable a necessary shift in perspective that might encourage further personal development.

Essential to the development of knowledge management is reflective practice, considered as viable in the workforce as it is in the writing classroom. Professionals in industry and in the board room have found that reflection enhances workers' ability to perform complex tasks. Similarly, when students are asked to engage in reflective practices, their progress can be traced from lower division courses into their major course work and pre-professional studies (Butcher, 2009; Ostorga & Estrada, 2009; Xiao, Paterson, Henderson, & Kelton, 2008). Studies focused on transfer of skills have found students who reflect on their work not only improved their writing skills for educational purposes but also developed their professional writing skills (Argyris & Schon, 1974; Schön, 1983, 1987). An increased interest in reflection has been noted in fields as varied as education (Butcher, 2009), design (Ostorga & Estrada, 2009), and nursing (Xiao et al., 2008).

In an address to the American Educational Research Association, Schoenfeld (1999) identified transfer as one of the six most basic domains of educational research in which progress must be made in the 21st century. He argued for a renewed theory of transfer. Research had shown that a push was needed "to help students develop the knowledge and skills necessary to be successful in a rapidly changing world" (Barron & Darling-Hammond, 2008). This emphasis resulted in a movement to produce "meaningful learning" through communicating and collaborating; researching ideas; and collecting, synthesizing, and analyzing information (Barron & Darling-Hammond, 2008). To develop these higher-order skills, programs such as project-based learning (PBL) were initiated. PBL fulfilled the objectives by encouraging students to collaborate on projects, develop products, organize events, or present programs to an audience (Barron & Darling-Hammond, 2008).

Thomas (2000) identified five key characteristics of effective project-based learning:

- Central to the curriculum
- Focused on questions or problems that drive students to encounter central concepts and principles of a discipline
- Involves students in constructive investigation that requires inquiry and knowledge building
- Student-driven (students are responsible for designing and managing their work)
- Authentic (focused on problems that occur in the real world and that people care about). (pp. 3-4)

Integrating these essential features of project-based learning with best practices of teaching and learning could help students transfer knowledge more effectively.

In the transfer studies conducted in the past 25 years, a number of instructive findings have been recorded (Cheng & Hampson, 2008). The meta-analytic study of Blume, Ford, Baldwin, and Huang (2010) demonstrated that “the transfer of training is influenced by a variety of predictor variables (e.g., motivation of trainee, learning outcomes, supportive transfer climate)” (p. 28). The findings of their study offered some guidelines for training professionals but provided no overall answer for enhancing effective transfer. Above all, this study demonstrated that there are no predictors for ensuring transfer, indicating that instructors should consider multiple transfer strategies. Blume et al. (2010) asserted,

The most significant gains in transfer will come when learning is more tightly integrated in the process and in reward systems that already matter in the firm. The challenge is not just how to build a bigger and more influential transfer support system; it is how to make transfer a more integral part of the existing organizational climate. (pp. 32-33)

Determining whether school-based knowledge is less valid than workplace knowledge continues to be a concern for educators and employers. The differing goals of some tasks, including writing, produce a feeling of disconnect for many students and workers. Dias,

Freedman, Medway, and Par (1999) argued, “Writing at work and writing in school constitute two very different activities, one primarily . . . oriented toward accomplishing the work of schooling, and the other primarily an . . . economic activity” (p. 223). Even with “such programs as cooperative education and internships, in which students are immersed in workplace communities of practice” (Brent, 2011, p. 403), students often fail to display transfer in any meaningful way.

Transfer researchers Smart and Brown (2002) proposed that it may be the term transfer hindering the ability of students as they enter new writing situations to learn “new genres, new ways of behaving and new criteria for success” (as cited in Brent, 2011, p. 404). The answer may be to use the more familiar term transform rather than transfer. This concept was revealed in a professional writing class in which students had to relearn their skills in a new domain. The study found that “skills in reading rhetorical situations and writing collaboratively” enabled learners to “adapt to new writing situations” (as cited in Brent, 2011, p. 404). Likewise, the idea of transfer should be “re-conceptualized” by viewing it “not as a mechanical transporting of knowledge but rather as a way of using old knowledge as a platform for launching new knowledge” (Brent, p. 404). Creating a “transfer-encouraging environment” (Freedman et al., 1994, p. 187), by using workplace terminology such as deliverables and deadlines, could provide the basis for more generalizable knowledge.

Transfer Theory

Early researchers in the field of psychology laid the groundwork for further study in the field of learning transfer. Most importantly, Thorndike (1913) demonstrated in his influential work *Theory of Identical Elements* that the learning source and learning target must share

common stimulus-response elements. The theory proposed that transfer depends on the presence of identical elements in the original and new learning situations (Thorndike, 1913).

Later theorists, such as Cormier and Hagman (1987), asserted that transfer of learning occurs when “prior-learned knowledges and skills affect the way in which new knowledges and skills are learned and performed” (p. 1). De Corte (2003), taking into account contemporary literature, redefined the term as “the broad, productive, and supported use of acquired knowledge, skills, and motivations in new contexts and learning tasks” (p. 142). Perkins and Salomon (1992) observed that “transfer of learning occurs when learning in one context enhances (positive transfer) or undermines (negative transfer) a related performance in another context” (p. 2).

Schunk (1991), who has written extensively on the important aspects of student self-regulation and motivation, outlined the differing modes of transfer based on the similarities and differences between the two learning situations and the cognitive process and mental analysis involved in learning. Table 2.1 presents an overview of the principal categories of transfer (Schunk, 1991).

Table 2.1 Principal Categories of Transfer

Type	Characteristics
Near	Overlap between situations, original and transfer contexts are similar.
Far	Little overlap between situations, original and transfer settings are dissimilar.
Positive	What is learned in one context enhances learning in a different setting.
Negative	What is learned in one context hinders or delays learning in a different setting.
Vertical	Knowledge of a previous topic is essential to acquire new knowledge.
Horizontal	Knowledge of a previous topic is not essential but helpful to learn a new topic.
Literal	Intact knowledge transfers to new task.
Figural	Use some aspect of general knowledge to think or learn about a problem.
Low Road	Transfer of well-established skills in almost automatic fashion.
High Road	Transfer involves abstraction so conscious formulations of connections between contexts.
High Road/Forward Reaching	Abstracting situations from a learning context to a potential transfer context.
High Road/Backward Reaching	Abstracting in the transfer context features of a previous situation where new skills and knowledge were learned.

Near transfer refers to knowledge and skills applied in the same manner each time the knowledge and skills are used. Similar to the behavioristic perspective, this description suggests that, in order for learning transfer to occur, the transfer task must share specific identical elements with the original learning task. Far transfer refers to skills and knowledge applied in situations that change. It would seem reasonable to assume that instructors can help students apply near transfer skills more readily than far transfer skills. Yet, theorists, educators, and workplace leaders have been challenged to find how to bridge the gap between near and far transfer.

Transfer scholars Perkins and Salomon (1992) maintained that reflection on one's thinking processes, or metacognition, appears to promote transfer of skills. Building on the work

of early theorists such as Thorndike (1913), Perkins and Salomon integrated findings from several studies focused on transfer by advancing the low road and high road conditions of effective transfer. These studies found that “instruction that incorporates the realistic experiential character of *hugging* and the thoughtful analytic disposition of *bridging* seems most likely to yield rich transfer” (Perkins & Salomon, 1992, p. 8). The researchers used the term *hugging* to refer to reflexive or low road transfer, in which “instruction directly engages learners in [context] to the performances desire” (Perkins & Salomon, p. 7). The term *bridging* refers to high road transfer, in which “instruction encourages the making of abstractions, searches for possible connections, mindfulness, and metacognition” (p. 8). The studies of Perkins and Salomon (1992) suggested that transfer is often elusive but can be attained “if [education] is designed to do so” (p. 8).

Fishman and Reiff (2008) conducted studies emphasizing the importance of high road or “mindful” transfer rather than low road or “well-practiced learning triggered by conditions similar to those in the learning context” (p. 1). Concurring with Perkins and Salomon, Fishman and Reiff (2008) believed that conventional educational practices often fail to establish the conditions for reflexive transfer, or transfer that “involves a search for connections” (p. 2).

Several theories of transfer, specifically, direct-application theory of transfer and Preparation for Future Learning (PFL), had a limited representation in the literature related to this study. Gick and Holyoak (1980) proposed the direct-application theory calling it “explicit abstraction.” The theory is focused on the ability of learners to apply a newly learned premise directly and independently to a new setting by using problem-solving skills (Bransford & Schwartz, 1999). Unlike Vygotsky’s theory of Zone of Proximal Development (ZPD), which encouraged learners to complete tasks collaboratively, this approach requires the subject to work

out problems without feedback or support from others. The theory of PFL differs from direct-application theory in that it emphasizes the “active and constructive process” of learning as well as the “active nature of transfer” (De Corte, 2003, p. 143). De Corte (2003) held to the re-conceptualized view of transfer in which a learning environment must be designed to yield transfer effects; training students in “orienting and self-judging” could benefit their academic performance (p. 144).

Engeström (2001), a recognized researcher of learning transfer and activity theory, suggested that not all learning transfer theory is cognitivist. The emphasis on “the understanding of deep structures and general principles,” as Bruner (1966) suggested, is a departure from the cognitivist views of transfer. In fact, Tuomi-Grohn and Engestrom (2003) connected the notion of transfer theory to Thorndike’s theory of identical elements. Bereiter (1995) held to the concept of transfer of principles based on transfer of dispositions (Judd, 1939). A dispositional view of transfer asserts that the habits of the mind, such as scientific thinking, moral reasoning, or rhetorical thinking, may be transferable (Brent, 2011). However, Brent (2011) pointed out that transfer of dispositions and other modes of transfer are equally difficult to attain.

The research of transfer theory has taken a tumultuous path in the past century—from the theory of identical elements (Thorndike, 1923), to knowledge management (Wenger, 2004), to learning theory (Perkins & Salomon, 1992), to a dispositional view of transfer (Bereiter & Scardamalia, 2010). This path has led to changes in how theorists study transfer, how the workplace emphasizes knowledge management, and how educators teach to transfer.

Metacognition and Transfer

Integral to the researcher's study is understanding how the studies of learning theory, knowledge management, and transfer of learning connect to the study of metacognition. The study focused on capturing differences in students' perceptions concerning their ability to use the knowledge gained in FYC in other learning situations, making a study of metacognitive skills imperative. First used by Flavell (1976), the term metacognition (i.e., thinking about thinking) refers to the ability to assess one's own cognitive skills. Flavell (1979) described the concept in this way:

One's knowledge concerning one's own cognitive processes and products or anything related to them, e.g., the learning-relevant properties of information or data. For example, I am engaging in metacognition if I notice that I am having more trouble learning A than B; [or] if it strikes me that I should double check C before accepting it as fact. (p. 232)

Flavell delineated two classes of metacognition: metacognitive knowledge and metacognitive experience. Metacognitive knowledge is defined as understanding how thinking works and how rehearsal improves memory (Flavell, 1979). Metacognitive experience is defined as focusing on feelings associated with metacognition (e.g., having a word on the tip-of-the-tongue) (Flavell, 1979). In order to regulate one's metacognitive skills, three basic skills are needed:

- Planning: referring to the appropriate selection of strategies and the correct allocation of resources that affect task performance
- Monitoring: referring to one's awareness of comprehension and task performance
- Evaluating: referring to measuring the final product of a task and the efficiency with which the task was performed. (Jacobs & Paris, 1987, p. 259)

Although metacognitive skills were first implemented by scholars in other domains, transfer scholars found that these skills could also be applied to learning transfer. Perkins and

Salomon (1992) maintained that “metacognition appeared to promote transfer of skills” (p. 5). Compositionists Fishman and Reiff (2008) concurred: They recorded the findings of studies that emphasized the importance of high road or mindful transfer rather than low road or well-practiced learning, triggered by conditions similar to those in the learning context. However, they proposed that conventional educational practices often fail to establish the conditions for reflexive transfer, or transfer that involves a search for connections (Fishman & Reiff). The compositional studies conducted by Jarratt et al. (2007) found that students who made statements of “unacknowledged learning” often reconsidered their initial experiences after they engaged in meta-reflection, an activity writing researchers consider key to learning (p. 11). The researchers claimed that “the lack of meta-language of writing. . .might also impede [students] from making connections between their writing courses” (Jarratt et al., p. 11).

In their quest to understand the process more clearly, researchers in the field of educational psychology have connected the domain of dispositions, which may include metacognition and self-efficacy, to that of learning transfer. An understanding of metacognition underlies an understanding of the dispositions of students. In fact, metacognition is a pre-condition of self-efficacy. The social learning theory of Bandura (1986) proposed that learning occurs through observing models of behavior, attitudes, and the emotional reactions of others. The observer forms an idea of how new behaviors are performed and chooses similar behaviors. Self-efficacy theory (Bandura, 1971b, 1982) delineated that how one views his/her ability to perform a task influences how one will behave to achieve that task.

According to the theory, self-efficacy perceptions are formed by four sources: the interpreted results of past performance (i.e., mastery), modeling or vicarious learning, the level of social persuasion received, and one’s physical and emotional state (Bandura, 1986; Lent,

2004; Zeldin & Pajares, 2000; Zimmerman, 2000). While most theorists concurred with Bandura's notion that mastery was the strongest predictor of self-efficacy, several studies have indicated results inconsistent with this theory. For example, Schaub and Tokar (2005) reported differing results for males and females, making it difficult to conclusively infer the effect of self-efficacy sources.

Nonetheless, developing pedagogical techniques to foster student dispositions and encourage self-efficacy has become a critical objective of composition instruction. Colbeck, Cabrera, and Terenzini (2000) recorded a meta-analysis of 39 studies wherein self-efficacy beliefs accounted for approximately 14% of the variance in students' academic performance and 12% of the variance in their academic persistence (Multon, Brown, & Lent, 1991). Bandura (1986) established that an individual's judgment of whether one has the capability to perform a task (i.e., self-efficacy) will correlate with the amount of effort one will exert to accomplish a task (i.e., motivation). This finding suggests a connection between transfer and the composition classroom.

Driscoll's (2011) study on writing contexts and perceptions of transfer indicated similar findings to those of other studies (Beaufort, 2007; Haskell, 2001). In Driscoll's study, eight sections of FYC students were asked to participate in two brief surveys that focused on attitudes toward writing, perceived application of writing skills/transfer, and rhetorical awareness. The survey included both qualitative and quantitative questions. Driscoll (2011) reported that a critical aspect of transfer is the quality of the original learning that takes place; specifically, how easy or difficult it is for students to recall information and how motivated they are to learn in the first place. The outcomes demonstrated that students' beliefs about the possibility of transfer declined from the beginning to the end of the semester, essentially showing the failure of

learning transfer rather than its success. While the results of the study prompted questions concerning the effectiveness of compositional pedagogies, the findings also indicated the role other issues play in learning transfer.

Driscoll and Wells (2012) called for writing transfer research that would investigate the following areas: what individuals bring with them to a learning situation, how they navigate activity systems, how dispositions impact individual learning, and how the instructor might engage more effectively with students in the classroom. The current study, based on the research of Driscoll and Wells, also examined self-reports, judgments, and evaluations of students in several FYC courses to demonstrate the level to which dispositions are relevant to one's ability to transfer.

Compositionists have considered several learning theories as they relate to dispositions and knowledge transfer: activity theory (i.e., actor-oriented theory) and expectancy-value theory. A distinction should be made between the classical perspective of transfer and activity theory. A classical view of transfer emphasizes how knowledge shapes one's ability to resolve problems in a variety of situations (Marini & Genereux, 1995; Reed, Ernst, & Banerji, 1974). However, Lobato (2003) pointed out that those who hold a classical perspective tend to "examine the formation of particular, highly valued generalizations rather than the generalization of learning more broadly" (as cited in Lobato, 2006, p. 436). While most transfer theorists define the term transfer as "the application of knowledge learned in one context to a new context" (Bransford et al., 1999), the actor-oriented transfer perspective defines transfer as "the generalization of learning, which can also be understood as the influence of learners' prior activities on their activity in novel situations" (as cited in Lobato, 2006, p. 436).

Most theorists agree that contextual learning holds the greatest potential for generalization. Bransford et al. (1999) argued that “knowledge that is taught in only a single context is less likely to support flexible transfer than knowledge that is taught in multiple contexts” (p. 78). Other studies have suggested that the number of contextual situations may not be as critical as the content “regularities and properties to which students’ attention is drawn and that students notice” (as cited in Lobato, 2006, p. 444). Concepts such as framing (Engle, 2007) indicate that educators must develop pedagogical practices focused on limited contexts while also promoting inter-contextuality, or “the constant displacement of meanings to new contexts” (Medina, 2006, p. 49). Marton (2006) delineated that a single context can be effective if the educator finds ways to emphasize disparity in the context of learning.

Recognizing the limitations of FYC, composition theorists, including Downs and Wardle (2007), have encouraged the study of knowledge transfer based on an understanding of student dispositions. The researchers found that students in their study “did not perceive a need to adopt or adapt most of the writing behaviors they used in FYC for other courses” (Downs & Wardle, p. 76). Based on Russell’s (1995) study, Wardle (2009) argued for using activity theory to design a curriculum that can help students generalize concepts from FYC to a variety of other contexts. Wardle (2009) also asserted that compositionists must encourage students and instructors to see writing in FYC as a “disciplinary bridge” (p. 782).

Another theory that could explain how student dispositions, attitudes, or beliefs are connected to the transfer of knowledge is that of expectancy-value theory (Atkinson & Feather, 1966; Eccles (Parsons) et al., 1983; Feather, 1969). These theorists linked action to the value placed on activities: we do tasks we value positively and avoid tasks we view negatively (Wigfield & Eccles, 1992). More recent studies in the fields of education and psychology

support this theory, demonstrating that self-efficacy and other areas of disposition were found to be crucial to students' ability to apply writing knowledge successfully (Graham & Harris, 2000; Klassen, 2002).

When applied to composition studies, this theory suggests that initial student motivation depends upon the degree to which students believe their FYC course will be valuable to other collegiate writing situations, making the transfer of knowledge to other situations more probable (Driscoll, 2011). Researchers concur that students will exert more effort if they perceive the value of the task (Bergmann & Zepernick, 2007; Downs & Wardle, 2007; Driscoll, 2011; Wardle, 2009). The effect of self-efficacy on the ability to write should not be underestimated (Klassen, 2002). In one study, over half of the students indicated that writing in their majors was "a difficult and unrewarding task"; respondents also reported "writing difficulties, such as misunderstanding of audience awareness, lack of rhetorical and argumentative knowledge, lack of awareness about the writing process, and difficulty in making their own meaning from others' words and ideas" (Gambell, 1991, pp. 424-430). Undeniably, students' beliefs about their writing have some level of influence on their writing performance.

Instructors of writing understand the unpredictable nature of knowledge creation and transfer. Cook and Brown (1999), theorists in the field of scientific knowledge, argued that new knowledge creation and application require the knowledge transformer to move the knowledge from one situation to another. This transfer will result in losses or variations during the process (Brown & Duguid, 2001; Szulanski & Jensen, 2006). Jensen and Szulanski (2004) found that loss occurs through knowledge "stickiness," or the inability of knowledge to move within the process. Elwyn, Buetow, Hibbard, and Wensing (2007) asserted that this type of dilemma

should be expected. The key is to identify the potential sources of problems in a given context and to actively manage the process.

While retention of knowledge is often considered the first step to transferring knowledge, a shift toward promoting transfer of knowledge has gained ground in some educational domains (Mayer, 1995). Mayer (2002) outlined a Revised Taxonomy, a restructuring of Bloom's Taxonomy of Educational Objectives (Anderson & Krathwohl, 2001). The revision focuses on "a broader vision of learning that includes not only acquiring knowledge but also being able to use knowledge in a variety of new situations" (Mayer, 2002, p. 226). Mayer and Wittrock (1996) maintained that "knowledge transfer occurs when prior learning (Task A) affects new learning (Task B)" (p. 48). Based on this definition, Mayer and Wittrock delineated five complex cognitive process categories: Understand, Apply, Analyze, Evaluate, and Create. By calling for more comprehensive ways to assess learning, this taxonomy may enable educators to develop educational objectives that will result in retention and transfer (Mayer, 2002). The key is to produce learning outcomes that promote "meaningful learning" rather than "no learning" or "rote learning" (Mayer, p. 227). Mayer (2002) further explained that "a focus on meaningful learning is consistent with the view of learner as knowledge constructor in which students seek to make sense of their experiences" (p. 227). These theories of metacognition have informed the current theories of composition instruction.

Most research on self-efficacy, motivation, and self-perceptions of college students has focused on the extent to which these areas affect educational outcomes (Pajares, 2005). The researcher's study did not investigate outcomes, allowing for other researchers to contemplate this approach. The researcher addressed the learner and his/her relationship to the transfer

problem. It is important to note that transfer theorists in the domain of writing have primarily focused on the agency of knowledge transfer rather than on the individual learner.

Emphasizing Self-Reflective Practice in the Composition Classroom

The study's focus on students' perceptions of their ability to transfer knowledge learned in FYC to writing in other domains may have significant implications on how to teach composition to promote transfer (Mayer, 2002). Since the late 20th century, one of the most discussed areas of learning transfer in the field of composition instruction has been that of reflective practice, or thinking about one's writing. The power of encouraging student motivation and self-confidence must continue to be the focus of writing instructors and of composition pedagogy (Barr & Tagg, 1995).

Employing the metacognitive approach, Schön (1983) challenged educators to reassess the roles of technical knowledge versus general knowledge in developing professional excellence. By emphasizing the use of lessons learned throughout life, Schön's perspectives on reflective learning have influenced the study of health professionals, architectural design, and teacher education. The reflective process provokes several questions:

- How would an experiment in reframing a problematic situation be evaluated?
- How does the practitioner make use of the experience accumulated in earlier practice?
- How does the practitioner escape or compensate for the limits of a controlled experiment? (Schön, 1983, pp. 132-133)

These findings can be “generalized by promoting an epistemology of practices based on reflection-in-action” (Schön, p. 287). Schön described this practice as determining how the lessons learned in one situation may be used to construct new applications.

As asserted by Berlin (1988), the social-epistemic theory of rhetoric, a form of expressionism, holds that there are no arguments ascended from transcendental truth since all arguments arise in ideology. In fact, “every pedagogy is imbricated in ideology” (Shor, 1987, p. 97). Therefore, no one group can determine what is right, what is good, or what should be expected; the greater good of all is emphasized. With its focus on parity, social-epistemic thought is particularly suited for self-criticism and self-revision—important features of metacognition. The awareness that the use of language tends to be divisive, giving one privilege or power over another, is a threshold for students. Students begin by identifying how they have been marginalized or kept from participating in the learning process. Shor (1980) observed “that students must be taught to be their own agents for social change, their own creators of democratic culture” (p. 48). Individuals often believe they have a certain path of life, that change is impossible, or at least difficult. Learners must find opportunities for “self-discipline, self-organization, collective work style, or group deliberation” (Shor, 1980, p. 70).

This theory informs the contemporary perspective of the distribution of power in the classroom, emphasizing a move away from the current-traditional modes of prescriptive grammar, teacher-centered instruction, and teacher-graded assessment. Berlin (1988) argued that knowledge is “a product of the observer, the discourse community, and the material conditions. . . . [And it is with language] that we come to know each of these social constructions” (p. 488). Both consciousness and material conditions influence each other, “creating a self from a particular historical and cultural movement” (Berlin, p. 489).

Social-epistemic rhetorical pedagogy focuses on enabling students to “extraordinarily re-experience the ordinary” (Shor, 1980, p. 93). As opposed to the authoritarian approach, the social-epistemic approach inspires “a democratic model of social relation” (Shor, p. 95).

Introduced by Freire (1973), this model makes teacher and learner equals, engaged in an environment that is “loving, humble, hopeful, trusting, critical” (Shor, p. 95). Best practices of FYC support student-centered activities such as peer reviewing, portfolio instruction, and self-reflective practices. Students are encouraged to shape the course assessment practices by becoming “active subjects,” empowering them to become agents of social change rather than victims (Shor, p. 97). Shor admitted that the outcome of this open-ended classroom will be arbitrary. Encouraging a “liberated consciousness” is the ultimate success of social-epistemic rhetoric; however, it is the most difficult to enact (Shor, p. 97).

One of the objectives of composition departments is to find pedagogical elements that will help students transfer learning and skills acquired in the English classroom to other situations, or, simply put, teaching to transfer (Fishman & Reiff, 2008). Understanding how learning transfer happens is critical to how teachers design, develop, and deliver instruction. Yet, nearly all research studies of writing-related transfer had been confined to the field of technical communication. Smit (2007) concluded that no research studies had concentrated directly on the nature of transfer in writing. The lack of research in learning transfer and writing studies may have been caused by the failure of disparate fields of study (e.g., psychology, organizational management, communication, composition) to reach across disciplinary boundaries. To read a journal or to attend a seminar outside of one’s discipline had been an infrequent event. Wardle (2009), one of the few compositionists who did make connections among learning domains, considered the topic of FYC writing-related transfer problems an important element of composition pedagogy. At the center of her study was the question: What elements of teaching affect transfer?

Other composition theorists conducted similar studies concerning FYC. Fraizer (2010), who concurred with Perkins and Salomon (1992), found that conventional pedagogical approaches must be reconsidered, especially in the writing classroom. Fraizer based his notions on the activity theory of Vygotsky (1978), specifically the Zone of Proximal Development (ZPD), a theory that encourages learners to complete tasks collaboratively while learning from one another. For example, genre theorists encourage students to interact with scholars and researchers in the various fields to learn the most appropriate and effective means of writing in those fields. Based on the studies of Miller (1984) and Bazerman (1994), Russell (1997) theorized that one must understand that texts “are all used to operationalize the same recurring, typified actions of an activity system” (p. 518). Using qualitative data for his research, Fraizer (2010) concluded that the development of students as academic writers may begin in FYC but is not completed there. It is a process that must establish an awareness of writing expectations and strategies through genre analysis and reflection. Fraizer noted one troublesome question remained: Are students ready for these complex activities in FYC? Studies have been inconclusive.

Within the realm of composition, an important body of research has focused on the role student dispositions, or self-perceptions, have played in the transfer of writing skills. Perkins, Tishman, Ritchhart, Donis, and Andrade (2000) described dispositions as qualities that determine how learners use and adapt their knowledge. Building on the transfer work of previous studies (Beaufort, 2007; Downs & Wardle, 2007; Russell, 1995; Smit, 2007), Driscoll and Wells (2012) conducted separate studies in which they found student dispositions to be essential to the study of learning transfer in the composition classroom. These studies have also determined self-efficacy to be a predictor of academic performance. While some researchers have studied the

roles of contexts and curriculum as they relate to writing transfer, the findings of Driscoll and Wells revealed that dispositions played a vital role as well.

Related to the concepts of dispositions and self-efficacy is the notion of meta-awareness. Beaufort (2007), Driscoll (2011), and Wardle (2009) have promoted composition instruction that emphasizes intentional acts leading to more effective meaning-making. Downs and Wardle (2007) argued that we must re-imagine the traditional teaching college writing goal of FYC by moving from teaching “how to write in college” to teaching about writing and “from acting as if writing is a basic, universal skill to acting as if writing studies is a discipline with content knowledge to which students should be introduced” (p. 553). Their findings demonstrated that, because the metacognitive approach allows learners to think about learning, learners can construct their own connections between what has been learned in the past and what is being learned in the present. The goal is for students to become aware of their own learning, enabling them to take control of the learning process. This self-awareness will increase the accessibility of learning and, therefore, the ability to apply that learning in new and various situations (Downs & Wardle, 2007).

Studies have shown that individuals who focus on consciousness during an event may, in fact, alter the experience in both positive and negative ways (Chin & Schooler, 2010). Chin and Schooler (2010) noted that subjects who rated their happiness throughout the study reported less happiness than subjects who did not rate their happiness. This inquiry supported findings that demonstrate intentional reflection may affect the learning process more than the awareness that develops through introspection (Chin & Schooler). However, as composition instructors encourage self-reflection and other means of meta-awareness in their classrooms, both

instructors and students may gain a deeper knowledge of how to employ this essential human skill.

Wardle (2009) conducted a longitudinal study in which she focused on students with common majors enrolled in several of the same courses. One of the courses was linked to the FYC course, a rhetorically-based composition course. Wardle used a mixed methods approach: teacher interviews, focus groups, and surveys as well as student focus groups and surveys. While the findings of Wardle's study were largely inconclusive, it was determined that the data collected from the study could be generalized to other FYC courses. It was also concluded that emphasizing the importance of purpose, expectations, and context-specific support is essential to successfully completing new writing tasks (Wardle, 2009).

An area of instruction that has played an important role in encouraging, or discouraging, self-reflection is writing assessment. Contrasting traditional writing assessment with an emergent approach, Huot (1996) emphasized the interpretive acts of reading and writing, maintaining that those who teach writing "should be concerned with creating assessment procedures that establish meaningful contexts within which teachers read and assess" (p. 559). These contexts resulted in more effective meaning-making, thereby increasing the possibility of transfer.

The shift of emphasis from summative assessment to formative assessment has also added to modes of evaluation that encourage metacognition (De Corte, 2003; Schön, 1983) as well as student-centered instruction. Assessment researchers contend that evaluative approaches should be used to improve teaching and learning rather than used merely as a means to pass or fail students or to promote or dismiss workers. Aligning himself with Huot (2002), Gallagher (2011) maintained that "assessment is about power and politics not only in terms of who is

assessed and how, but also who assesses and how” (p. 458). Composition assessment must be a “respectful conversation” that brings about “orderly progress” in writing assessment research (White, Lutz, & Kamusikiri, 1996, p. 11). As composition theorists collaborate with educational assessment experts to create a “unified” field of writing assessment (Gallagher, p. 459), stakeholders will gain a more equal claim in the educational process.

The implications of learning transfer for pedagogical approaches should not be underestimated; in fact, institutions of higher education consider the measurement of learning outcomes of general education courses to be increasingly important (Humphreys, 2009; Schneider, 2008). For this reason, instructors of composition should continue to search for more effective methods of measuring students’ writing ability. To explain why and how negative transfer occurs, Grego and Thompson (2008) introduced the idea of “thirdspaces”—the distance between general education courses and the skills required for courses in chosen disciplines. The researchers wanted to provide a tool for faculty and administrators to make visible connections between the curriculum in lower-level courses and the expectations for student competencies required by upper-level courses for majors.

Portfolio instruction, or teaching that emphasizes process, supports the expressionistic ideals of student-centered learning and self-reflective practice (Elbow & Belanoff, 1997). Composition theorist Kathleen Yancey (2001) observed, “No matter what the tools used to create them—pencils or pixels. . . —writing portfolios offer, most importantly, the chance to collect, select, and reflect” (p. 16). Both portfolios for learning and portfolios for assessment “support choice, variety, and reflection” (Reynolds & Rice, 2006, p. 1).

An instructor who uses portfolios for learning, or process portfolios, does not assign grades to draft papers; instead, the instructor writes marginal and end comments on the drafts,

delaying grades until the end of the semester. Reynolds and Rice (2006) asserted that this approach emphasizes “[the instructor] as a reader first and an evaluator second” (p. 6). The main concern should not be to wield power through the use of grades but to respond to students’ work in ways that help them become more effective writers (Reynolds & Rice, 2006). Condon (2011) argued for the positive effects of delayed grading on the learning process:

Delaying grading decreases the temptation. . .to see grades as ends in themselves. . . . delayed grading helps create “teachable moments”. . .and alters the teacher-learner relationship for the better. . . .with the learner taking the major share of the responsibility. (pp. 208-209)

The learning portfolio promotes formative evaluation, in that the process of writing is emphasized rather than the product. Students are given freedom to choose the content that is important to them and to determine the method of organizing that content. The portfolio includes self-reflective pieces that present evidence of students’ writing and thinking processes, a metacognitive exercise often overlooked in summative evaluations.

Portfolios for assessment, or best-works portfolios, contrast with learning portfolios in that the emphasis shifts from the learning process to the final product. Writing is never done only due, an adage held by thoughtful compositionists, is often lost on those who hold to the philosophy that a draft turned in for evaluation is finished writing. While the best-works assessment tool does not go so far as to consider revised drafts as finished, the drafts are evaluated at this point in the process. Like the artist who collects a portfolio of her best artistic works, a best-works writing portfolio showcases writing that best illustrates what the writer has learned from the course. In addition, displaying one’s best revised, polished writing fulfills a common objective of composition courses. In theory, weighting the final portfolio more heavily than other requirements will encourage students to give more attention to the revision process.

Following a student-driven approach, best practices also mandate that students work in groups to discuss their revision plans with peers, a collaborative practice espoused by constructivism.

The electronic portfolio (ePortfolio) is an assessment instrument endorsed by many researchers (Acker & Halasek, 2008; Desmet, Miller, Griffin, Balthazor, & Cummings, 2008; Lopez-Fernandez & Rodriguez-Illera, 2009; Mauk, 2003; van Aalst & Chan, 2007). Debates concerning the assets of student-designed webfolios and database-driven ePortfolios continue within writing studies. Considered one of the best practices of assessment, the ePortfolio can enhance revision and student reflection (Desmet et al., 2008). Early studies (Argyris & Schon, 1974; Schön, 1983, 1987) supported the premise that a student's ability to reflect is important both to first-year writing skills and to professional skills. Yancey (1999) asserted that reflection is a transferable practice that can be used to develop professional skills in a variety of areas such as education (Butcher, 2009), design (Ostorga & Estrada, 2009), and nursing (Xiao et al., 2008). van Aalst and Chan (2007) demonstrated that programs allowing students to build the assessment of their own portfolios also worked to "encourage questioning" that "emerged from student-directed inquiry" (p. 209).

Ultimately, composition instructors must determine whether the ePortfolio or the paper portfolio will address their students' needs more appropriately. Springfield (2001) notes several areas that must be considered: the intended audience, the availability of proper hardware and software, and the level of computer skills of students and faculty members. Instructors must understand that ePortfolios are not merely paper portfolios in electronic form (Reynolds & Rice, 2006, p. 5). Each click of a link creates a different experience for the individual reader. While the site must be easy to navigate, the purpose of the site must also be clear. Without these

clarifications, students may fail to appreciate how ePortfolios can engage them more deeply in learning (Tosh, Light, Fleming, & Haywood, 2005).

By encouraging collaboration between students and faculty, ePortfolios can be used to promote and assess knowledge transfer about writing (Acker & Halasek, 2008). A study conducted by Desmet et al. (2008) at the University of Georgia concluded that “revision, at least within the context of ePortfolio assessment, improves student writing” (p. 25). Another important aspect of ePortfolios is how they “may be used to promote as well as assess knowledge transfer across institutional and social divides, namely high school to college, general education to disciplinary courses, college to professional training” (Whithaus, 2010, p. 217). The ePortfolio system could be also used

to measure how well discrete writing skills (such as revision, use of evidence, awareness of audiences and purposes, and the ability to use different writing styles and correct usage conventions) aligned in writing samples drawn from lower division courses and upper division courses. (Whithaus, p. 217)

Whether instructors choose conventional or electronic portfolios, portfolios for learning or best-works portfolios, the teaching method chosen should promote meta-awareness through self-reflection. Tosh et al. (2005) proposed that ePortfolios appear to offer opportunities for learner control and are capable of promoting deep learning. This method of learning also encourages students to make connections with learning which occurs in differing contexts such as academics, the workplace, and the community. The recognition that learning occurs beyond the classroom makes ePortfolios attractive to many educators. Many composition departments now require the use of ePortfolios, making this pedagogical methodology a generally accepted approach to learning by both teachers and learners (Tosh et al., 2005).

The meta-awareness supported by student-centered instruction, formative assessment, and reflective practices allows individuals “the ability to monitor and control their thoughts,

which in turn makes goal-driven behavior possible” (Chin & Schooler, 2010, p. 39). The goal of facilitating knowledge transfer from FYC to other writing situations and domains should be a principal aim in pedagogical approaches.

Summary of the Chapter

While it is often difficult to determine how to teach to promote transfer (Baxter, Elder, & Glaser, 1996; Mayer, 2002; Phye, 1997), the studies reviewed here have been encouraging. The high road transfer study of Fishman and Reiff (2008) yielded valuable data about the FYC course: “When FYW [first-year writing] involves genuine inquiry and research, supported by substantial rhetorical instruction,” students will leave the course better able to “take the high road” to transfer (p. 12). It would also seem that self-reflective practices, such as those advocated by Schön (1983), Perkins and Salomon (1992), Wardle (2009), Fraizer (2010), Driscoll (2011), and Driscoll and Wells (2012), should be emphasized throughout FYC courses to help students expand their awareness of the various writing situations they will encounter.

The varied theories of how to teach writing, to use rhetorical strategies, and to implement effective assessment practices must continue to be reviewed. Although no single composition theory or transfer theory will satisfactorily resolve the dilemma concerning how to teach for transfer, an inclusive and balanced approach to the teaching of composition is needed. The synthesizing of the various aspects of learning, writing, assessing, and transferring can enable our students to blend their sense of English with their understanding of English. This study may aid composition instructors in their pursuit to teach students how to learn and how to think, essentially to enhance cognitive growth. By providing data concerning students’ ratings of their ability to transfer knowledge (i.e., metacognition), this study may also assist instructors as they

develop effective composition curricula that blend the elements needed to extend transfer to other situations. With increasing economic pressures and mounting student loan debt, the ability to use effective writing strategies across contexts has become an essential skill for students. No other skill may prove to have such practical significance.

In a lecture to his colleagues, John Henry Cardinal Newman (1852) confirmed: “Knowledge is capable of being its own end. . . .It is its own reward.” Therefore, it should be sought after for what it does to us rather than what it does for us. Our students would do well to internalize this philosophy by taking the knowledge imparted to them in the classroom and using it to be better citizens, employees, spouses, parents, and people. We could then say with Sir Francis Bacon (1620/1994): “*Scientia potentia est*,” that is, “Knowledge is power”—power to transform both the knowledge-bearers and their perspective of the world.

CHAPTER III

METHODOLOGY

Introduction

The purpose of this study was to examine students' perceptions of their ability to transfer the writing skills and knowledge gained in first-year composition (FYC) to other writing situations. The researcher observed how students' views of their own metacognitive practices, or an awareness of one's own knowledge (Meichenbaum, 1985), influenced whether they believed they had the ability to transfer their knowledge to other contexts. To inform the research of this study, the researcher synthesized the transfer theories of Salomon and Perkins (1989), Wardle (2009), and Driscoll (2011).

The Research Questions addressed by the study were as follows:

1. What is the relationship between students' judgments about their writing and their perceived ability to use those strategies in other courses and contexts?

Null hypothesis: First-year college students have little or no perception of their ability to transfer knowledge from FYC to other courses or situations.

2. How do first-year students rate their ability to transfer knowledge about writing from the FYC course to other courses and contexts?
3. Do students' ratings of their ability to transfer learning change from the beginning of the FYC course to the end of the course (one semester)? If so, in what direction?

Null hypothesis: First-year college students have little or no perception of their ability to transfer knowledge from FYC to other courses or situations.

4. Based on their reported major areas of study, is there a difference in students' perceived ability to transfer writing knowledge from FYC to other courses and contexts?

Null hypothesis: First-year college students have little or no perception of their ability to transfer knowledge from FYC to other courses or situations.

To address the Research Questions, the researcher chose a mixed-methods mode of data collection process: quantitative (responses from surveys) and qualitative (responses from focus group sessions). Creswell (2009) noted that this collection process may present several challenges: the need for extensive data collection, the time-intensive analysis of both textual and numeric data, and the necessity for the researcher to be well-versed in both modes of research. Understanding the challenges of this method of research was an important consideration for the researcher.

For the initial element of the process, a quantitative approach was used to analyze an existing dataset collected by the English Department in the form of pre- and post-semester Composition Surveys (2013-14). The surveys relied on self-analysis, or self-reporting. The independent variables of the study were the students' pre-test scores of their judgment about writing and their pre-test scores on their perceived ability to transfer skills to other courses. The dependent variables of the study were the students' ratings of their writing habits or levels of writing, students' ratings of their enjoyment of writing, students' ratings of their preparedness for college writing/other courses/writing beyond college, and students' ratings of the purpose/effectiveness of FYC courses.

The second element of the process included a qualitative set of three focus group sessions conducted to provide supportive data for how students viewed their experiences in the course. According to Rubin and Rubin (2005), "qualitative research is not simply learning about a topic,

but also learning what is important to those being studied” (p. 15). The open-ended questions were designed to address specific aspects of students’ judgments concerning the purpose of the FYC class, their expectations of the course, the skills they were expected to learn, and the skills they used in other courses or contexts.

Subjects of the Study

The existing dataset of the Composition Surveys (2013-14) used in this study had a carefully defined sample and population (see Appendices A and B). While the total population included all students from the University of Tennessee at Chattanooga, the sample consisted of undergraduate students enrolled in FYC courses with a total enrollment of no more than 500 students in selected courses. Chosen because of its availability and accessibility (Creswell, 2003), this sample could be representative of similar public colleges located in the southeastern United States. The sections were selected based on varying instructor philosophies, pedagogical approaches, and demographic characteristics of students.

The number of first-year respondents taking English Composition 1010 or 1011 for the first time was 189; their first language was predominantly English (97%). The respondents included 45% male and 54% female; 1% preferred not to indicate gender. The ethnicity and socio-economic status of the participants varied. The educational backgrounds of the students for the initial departmental study were not identified and may have included home school, public school, and private school. While the total population of university students for Fall 2013 consisted of 10,660 (*N*), the undergraduate population whose majors aligned with participants in the study consisted of 5,502 (*n*). Because a limited number of the available university majors were selected by the participants in the study, *n* is noticeably smaller than *N*.

Table 3.1 presents the percentage of university students who were majoring in the indicated disciplines and major areas of study. This information was gathered from the *UTC Fact Book* (2014) found on the UTC website.

Table 3.1 Fields of Study Indicated by Participants in Study; Number and Percentage of Undergraduate Students Who Have Declared These Majors (Fall 2013)	
Related Fields of Study to Participants	<i>n</i> and % of Undergraduate Students
Biology / Health Professions (Health & Human Performance, Nursing)	1322 (12.40%)
Business (Marketing, Management, Entrepreneurship, Accounting)	610 (5.72%)
Social Sciences (Psychology, Social Work, Communication, Economics, Education)	2296 (21.54%)
Engineering & Computer Science / Mathematics / Chemistry / Physics	452 (4.24%)
Humanities (History, Visual & Performing Arts, Languages)	205 (1.92%)
Undecided	517 (4.85%)
Note: Information taken from <i>UTC Fact Book</i> (2014). Survey <i>n</i> = 197 (those who indicated a major); total university population <i>N</i> = 10,660 (Fall 2013); majors from total undergraduate population that aligned with participants in study <i>n</i> = 5,402.	

The departmental researchers maintained confidentiality of each student by using the students' university identification numbers recorded on the Composition Surveys (2013-14). Members of the faculty were asked to administer the surveys to the FYC courses they were instructing during the fall semester. The confidential database developed in the English Department study was examined for the quantitative analysis in the researcher's study.

For the qualitative element of this study, the researcher conducted three focus group sessions of three to five participants. The sessions consisted of a group interview with a moderator, a specific set of questions, and a disciplined approach to studying ideas in a group

context. The sample of students was selected from FYC students enrolled in the same institution for Composition II. They were chosen from the student identification numbers that were matched with the dataset of the pre- and post-semester Composition Surveys (2013-14).

The students were contacted by the researcher to schedule 30-40 minute focus group sessions held on the university campus. They were asked open-ended questions in a location conducive to discussion. The questions allowed students to provide clearer explanations of any issues or concerns addressed in the quantitative survey they previously completed (see Appendices C, D, and E). The sessions supported Merriam's basic interpretive approach, a methodology in which "the researcher is interested in understanding how participants make meaning of a situation or phenomenon. . . and the outcome is descriptive" (Merriam, 2002, p. 6).

Materials Used in Data Gathering

Quantitative Method

For the primary instrument of the study, the current researcher examined the dataset from the Composition Surveys (2013-14), a two-part data collection instrument. The departmental researchers had previously used the Composition Surveys, modified from Driscoll's (2011) study, to collect data using similar methods. Driscoll's survey gathered similar information and for similar purposes as those of the departmental study; for this reason, the departmental researchers chose to use the survey with some modifications. Verbal permission to use the instrument was granted (D. Driscoll, personal communication, June 25, 2013). The surveys were distributed using Qualtrics (2015) online research software to provide accessibility to both students and instructors. Copies of the Informed Consent Form and the pre- and post-semester Composition Surveys (2013-14) are included in Appendices A, B, C, D and E.

The Composition Surveys (2013-14) were designed as an attitude instrument employing a five-point Likert-type scale indicating agreement, frequency, importance, quality, or likelihood of the factors. The following list designates the scoring of the Agreement Scale: 0 = Strongly Disagree, 1 = Disagree, 2 = Neither Disagree Nor Agree, 3 = Agree, 4 = Strongly Agree. A comprehensive score was computed from the individual scores. The surveys also included several short-answer, open-ended questions modified from Driscoll's instrument. In the survey pre-test, the students recorded ratings of how they anticipated they would be able to transfer knowledge from FYC to other contexts. In the post-test, students recorded ratings of how they perceived they used the knowledge learned in FYC in other contexts. Students who did not take both surveys were omitted from the research data. After these datasets were accessed, the results were analyzed using inferential statistics, specifically *t*-tests and analysis of variance (ANOVA), and descriptive statistics to identify patterns in the responses.

The content validity of the surveys may be considered adequate because of their use in a previous and similar study conducted by Driscoll. Information on empirical validity is available in Driscoll's article, in which she provided the results of her study (Driscoll, 2011). In a comparison of mean student responses, Driscoll's findings were consistent with a study conducted by Bergmann and Zepernick (2007); thus, the instrument can be considered reasonably valid to the extent that it measured what it was designed to measure and accurately performed the function(s) it was intended to perform (Patten & Bruce, 2009).

The nature of the self-analysis, or self-reporting, instrument could impact the validity of the departmental study and researcher's study. Self-reported data remain a necessary method of collection for studies focusing on attitudes or beliefs—the focus of this study. However, the self-reporting aspect may be considered elusive because only certain behaviors or judgments were

examined. For example, the degree to which one “will be prepared for college writing” may have been difficult for some students to determine, especially at the beginning of the semester. One way the researcher sought to alleviate the impact of this elusiveness was to refer to skills and traits that participants could easily recognize in their experience in FYC. In addition, the numerical scores of the quantitative piece of the instrument reduced the elusive construct (Patten & Bruce, 2009). Another area of validity the English Department researchers considered was the content validity of the selections on the Composition Surveys (2013-14). By placing the selections Strongly Disagree as selection 0 and Strongly Agree as selection 4, the researchers intended to sharpen the participants’ attention to their responses, thereby strengthening the validity of the responses.

Qualitative Method

For the qualitative aspect of this study, the researcher chose the sequential explanatory design (see Appendix C). Creswell (2009) asserted that this design’s “straightforward nature” and “easy implementation” (p. 211) make it a particularly desirable method for a study of this type. The rationale for using a subsequent qualitative element was to help the inquirer understand, explain, and build on the results of the quantitative element (Creswell, 2009). The qualitative instrument was chosen because the current research project “demand[ed] more rigor in the investigation of matters of belief and action” (McCracken, 1988, p. 28). To formalize the discussion, several ethnographic questions were used to open the focus group sessions. The critical undertaking of gathering literature on the subject of learning transfer led to the shaping of assumptions and the construction of the focus group questionnaire. Previous scholarship on the topic also provided categories and relationships to be investigated (McCracken, 1988).

Procedures

Emphasizing a social constructivist perspective, this study collected data focused on the perceptions of FYC students. This epistemology corresponded with the objectives of the study, namely determining the perceptions of students' concerning the FYC course and the ability to transfer the knowledge learned in the course. While some responses may have been brief descriptions of their experiences, more detailed responses provided opportunities for discovering themes and relationships (Bernard & Ryan, 2010).

The first step of the data collection process was to obtain approval to conduct the study from the university's Institutional Research Board (IRB). The composition director then granted permission for the researcher to access the results of the Composition Surveys (2013-14). A pilot test was used to refine data collection plans and to develop relevant questions. Using the Qualtrics (2015) online research software, the researcher collected the data gathered at the beginning and end of the Fall 2013 semester. The dataset released in Spring 2014 was analyzed to address questions proposed for this dissertation study.

The researcher contacted selected FYC students through university email to schedule times to conduct the focus groups. The Informed Consent Form was signed by each of the participants to allow the researcher to use the results of the discussions. The participants were informed that the discussions would be recorded with a digital recorder. The groups were held in private rooms with tables and chairs that provided adequate space for all participants. The rooms were accessible to participants with disabilities. All respondents were given the same time limit to discuss the questions posed.

The responses of the participants were recorded both digitally and manually to preserve observable behaviors during the discussions. These notes added more depth to the information

gathered with the quantitative dataset. Additionally, these notes summarized the content of respondents' answers, documented their use of language, and helped the inquirer focus on relevant information. While taking notes, the researcher made periodic eye contact with each respondent to show interest and to provide opportunities to observe the respondent's non-verbal behavior. The inquirer avoided communicating negative impressions, such as head shaking or frowning, in order to avoid making the participants feel as if they had given a wrong or unacceptable response. After the discussions, the digitally recorded responses were then transcribed and coded for content to address the guiding research questions posed in the study. The researcher wrote a narrative using the information gathered during the focus groups.

The final procedural step was to evaluate the responses based on the research questions. In addition, the data gathered from the Composition Surveys (2013-14) were analyzed to determine what, if any, relationship existed between the various factors. Using the data analysis methodology, the researcher attempted to establish a relationship between two or more quantifiable variables to make a prediction. However, no cause or effect was determined; only tendencies or relationships were described.

Methodological Analysis

The following section of the chapter outlines the two-part methodological analysis of the data, quantitative (surveys) and qualitative (focus groups), used to examine the study's four guiding research questions. The analysis of the quantitative data was addressed in the order of the Research Questions 1, 2, 3, and 4. The analysis of the qualitative data was organized by the various methods used in the study: observational protocols, coding strategies, and interpretation of the data.

Analysis of Quantitative Data

For the analysis of Research Question 1, Survey Statements 1, 5, 6, and 10 were aligned with the theme of Writing Perceptions; Survey Statements 3, 4, 12, and 14 were aligned with the theme of Transfer Perceptions. To compare the mean differences between the two sets of statements, paired-samples *t*-tests were conducted discretely on the pre- and post-test results.

When samples are large, relatively smaller differences between groups become statistically significant (Field, 2009). Statistical significance indicates probability of difference rather than magnitude of difference. After statistical significance was determined, effect size was calculated using Cohen's *d*. Cohen's (1988) categories for interpreting the magnitude of effect size were followed. The researcher employed this procedure with Research Question 1 and all other research questions where significance was identified.

For the analysis of Research Question 2, the researcher collected data from the pre- and post-test results of the statements mapped to Transfer Perceptions. Descriptive statistics were used to describe characteristics of the sample. In addition, qualitative analysis was used to determine how the focus group results may have supported the quantitative data.

For the analysis of Research Question 3, the researcher used paired-samples *t*-tests to determine whether there was a difference between the pre- and post-test means of Survey Questions 1-15 (see Appendices G and H). To reduce the chance of obtaining false-positive results, the required values to show significance were calculated using the Bonferroni (1950) technique to establish the corrected alpha level before multiple *t*-tests were conducted.

For the analysis of Research Question 4, the researcher used analysis of variance (ANOVA): first, on the pre-test results of Transfer Perceptions (Statements 3, 4, 12, and 14) and the indicated student majors, and second, on the post-test results of Transfer Perceptions and the

indicated student majors. These analyses were conducted to determine whether there was a relationship between students' perceptions of transfer and their indicated major of study.

Analysis of Qualitative Data

The focus group questions were used as probes to examine or enhance each of the research questions. In addition, the participants' responses helped the researcher expand on matters addressed in the surveys by connecting the emerging themes of the responses (see Appendix F). The qualitative portion of the data collection can be characterized as ethnographic: The investigator collected descriptions of behavior through observations, interviewing, documents, and artifacts (Hammersley & Atkinson, 2007; Spradley, 1980). According to Spindler and Spindler (1987), the most important requirement for an ethnographic approach is to explain behavior from the "native's point-of-view" (p. 20). The ethnographer achieves this goal by engaging and interacting with the participants. The use of the extant data of the pre- and post-semester Composition Surveys (2013-14), the FYC grades of the students, and the focus group sessions supported the ethnographic data collection method.

Observational Protocols

The investigator chose a research method based on observational protocols supported by several theorists. Creswell (2007) suggested that the inquirer should design and use a protocol to effectively record participants' responses and to organize thoughts on those responses. The researcher used a narrative technique based on the model of Cannell and Kahn (1968) to cull responses from open-ended questions. This model supports the research objective of discovering stakeholders' attitudes and beliefs as well as the bases on which their perspectives are formed.

The model found in *Structured Interviews: A Practical Guide* (2008) provided the rationale for posing open-ended questions to three focus groups (see Appendix C).

Several observational techniques were used to identify relationships revealed in the focus group responses (Bernard & Ryan, 2010). Linguistic connectors, such as causal relation, word re-occurrence, metaphor, analogy, and use of key-word-in-context, were some of the characteristics observed. A number of responses demonstrated a causal relation concerning an awareness of the inability to use academic discourse at the beginning of the semester and growth in this area by the end of the semester. Word re-occurrence (Osgood, 1959) was detected in the tendency to use the terms “proper” and “writing” together to form an idea (Bernard & Ryan, 2010). Examples of metaphor, specifically battle imagery and construction symbolism, were identified in the responses. The use of metaphor and analogy may reveal underlying themes and imagery represented in speakers’ thoughts, behaviors, and experiences (Lakoff & Johnson, 2003). The rhetorical device key-word-in-context was illustrated in the phrase “turn people off,” (Focus group participant, personal communication, March 31, 2014). This phrase indicates how a first-year student might describe the rhetorical concept of audience awareness. These linguistic patterns provided a means for categorizing the data.

Coding Strategies

An important element of analyzing the data gathered from focus groups is coding the information or “organizing the material into chunks or segments of text before bringing meaning to the information” (Rallis & Rossman, 1998, p. 171). Developed by grounded theorists Miles and Huberman (1994), the concept of coding serves to link themes and their expressions (Bernard & Ryan, 2010). In its basic form, grounded theory, delineated by sociologists Glaser

and Strauss (1967), is a theory of research analysis and epistemology that emphasizes using data to generate both theories and categories for analysis rather than applying an existing theory or framework to the data.

Before assigning meaning to the transcript information, the researcher hand coded the follow-up transcripts to compare and contrast the data. Hand coding generates descriptions, themes, and headings, revealing varying perspectives from individuals (Creswell, 2009). By clustering similar topics, abbreviating the topics as codes, and assembling the data into categories, coding provides a sense of the whole (Creswell, 2009). After the material was clustered appropriately, the categories were labeled with an *in vivo* term, one found in the text of the participant (Rallis & Rossman, 1998, p. 171).

To determine the use of emerging codes collected from the participants or predetermined codes based on the theory being examined, Creswell (2009) suggested that “the investigator develop a qualitative codebook with a table or record of predetermined codes” (p. 187). The codebook for this study was organized in columns with the names of the codes, a definition of each code, and specific examples of the codes found in the transcripts of the sessions. The codebook evolved as emerging codes were identified. In this study, the following themes emerged from the focus group responses: a growing awareness of the conventions of academic discourse, preparation for collegiate and vocational writing, and improvement in specific areas of proofreading and editing skills.

Tesch (1990) outlined an eight-step process for guiding the coding process:

1. Analyze the interview transcriptions getting a sense of the whole.
2. Jot notes on each of the interviews capturing the gist by asking “What does this mean?”
3. List the topics that become apparent after reading several interviews.
4. Cluster the similar topics; abbreviate the topics as codes; connect these codes to areas in the texts.

5. Turn the topics into categories by grouping the topics that relate to one another. (Line drawing can help with making the connections visible.)
6. Decide on final category names and alphabetize these codes.
7. Analyze and organize the data into each of the categories.
8. Recoding may be necessary. (pp. 142-145)

Using this process, the researcher analyzed the textual data collected in the focus groups and coded topics based on the literature, unpredicted codes, unusual codes that may be of interest to the field, and codes that address theoretical perspectives in research (Creswell, 2009). A grounded theory technique was employed to discover and understand patterns within the database because the study included multiple datasets. The findings were then correlated with the survey data.

Interpretation of Data

The final step of the qualitative data analysis was interpretation of the data. An essential element in the exploration for meaning is to analyze the themes that may be hidden in the language of the respondents (Creswell, 2009). Creswell (2009) asserted that a researcher may interpret data from a personal point-of-view, using one's culture, history, and experiences. The data can also be interpreted from a theoretical perspective by comparing or contrasting the findings in the transcripts with the literature or theories. Themes emerging from the study's qualitative data raised novel questions that this researcher chose to address.

Creswell (2009) emphasized the flexibility of qualitative interpretation. By taking many forms and adapting to different types of designs, this research approach ultimately empowered the researcher to call for change in the relevant field of study, making the qualitative portion of this study both engaging and valuable. The ethnographic nature of the study prompted the

researcher to conclude by posing further questions to encourage more research in the domain of learning transfer (Wolcott, 1994).

Summary of the Chapter

Chapter III provided an overview of the methodologies used for this research. The purpose of this research project was to determine how a sample of FYC students perceived their ability to transform the knowledge gained in FYC to knowledge that could be used in other contexts. To accomplish this goal, the examiner obtained and analyzed data from the extant Composition Surveys (2013-14), using a discrete statistical procedure for each research question. Finally, a qualitative dataset of 10 questions was delivered to three focus groups during the subsequent semester. A grounded theory approach was used to complete the analysis of the qualitative data.

CHAPTER IV

RESULTS

Background of the Study

Purpose of the Study

Using both quantitative and qualitative analysis, the researcher examined student perceptions of their ability to transfer knowledge from FYC to other domains. The quantitative portion of the study examined data from an extant study using pre- and post-semester Composition Surveys (2013-14) and served as the primary dataset to support the research questions. The qualitative data were gathered with focus groups and provided clarification for the quantitative data. By analyzing the data from the surveys and the focus group sessions, the researcher identified similarities and differences in student responses.

Return Rates of the Survey Data

A total of 199 (94%) of 212 students completed the pre-semester survey; a total of 194 (99%) of 197 students completed the post-semester survey. A total of 111 students who completed both the pre- and post-surveys were included in the quantitative analysis. These 111 students were eligible for the qualitative analysis. Eight students did not return to the university; thus, a total of 103 participants were invited to participate in the qualitative sessions. These students were contacted through university email to participate in one of the three focus group

sessions. Eleven of these 103 students participated in the three focus group sessions: three attended the first session, five attended the second session, and three attended the third session.

Descriptive Analysis of Data Aligned with Research Questions

The survey statements and the focus group questions were aligned with the study's four research questions to ensure that the data-gathering instruments addressed the guiding questions posed in the study. Table 4.1 presents the alignment of the survey and focus group questions with the research questions. See Appendix I for a more detailed triangulation matrix that serves as a tool to clarify how these elements fit together.

Table 4.1 Map Indicating Alignment of Survey Statements and Focus Group Questions with Research Questions		
Research Question	Survey Statement	Focus Group Question
1. What is the relationship between students' judgments about their writing and their perceived ability to use those strategies in other courses and contexts?	S1, S3, S4, S5 S6, S10, S12, S14	Q4, Q5, Q6, Q8, Q9, Q10
2. How do first-year students rate their writing from the FYC course to other courses and context?	S3, S4, S12, S14	all questions
3. Do students' ratings change from beginning to end of FYC course? If so, in what direction?	all statements (S1-S15)	Q1, Q2, Q3
4. Based on their reported major areas of study, is there a difference in students' perceived ability to transfer knowledge from FYC to other courses?	S6, S10, S12, S14	Q3, Q4, Q5

The following section of the chapter delineates how the quantitative and qualitative data address the study's research questions. The findings of the study are presented in the order of the research questions.

Analysis of Data for Research Question 1

For the analysis of Research Question 1 (What is the relationship between students' judgments about their writing and their perceived ability to use those strategies in other courses and contexts?), the researcher determined Survey Statements 1, 5, 6, and 10 addressed the theme of Writing Perceptions and Survey Statements 3, 4, 12, and 14 addressed the theme of Transfer Perceptions. Table 4.2 presents the alignment of the survey statements with Writing Perceptions and with Transfer Perceptions, respectively.

Table 4.2 Writing Perceptions Aligned with Survey Statements (1, 5, 6, 10) and Transfer Perceptions Aligned with Survey Statements (3, 4, 12, 14)

Writing Perceptions	Transfer Perceptions
Statement 1: I am a good writer.	Statement 3: I expect what I learn(ed) to help me with other courses.
Statement 5: I consider the purpose of the paper.	Statement 4: My English 1010/1011 course will prepare me for the writing that will be expected of me in college.
Statement 6: I enjoy writing.	Statement 12: I expect what I learn(ed) to help me write in my major.
Statement 10: I begin working when assignments are given.	Statement 14: I expect my English 1010/1011 course content to help me with writing beyond college.

To compare the mean difference between Writing Perceptions and Transfer Perceptions, separate paired-samples *t*-tests were conducted first on the pre-test results and then on the post-

test results; that is, pre-test (pre-pre) comparisons were followed by post-test (post-post) comparisons. When samples are large, relatively smaller differences between groups become significant (Field, 2009). Thus, after statistical significance was identified, effect size was calculated using Cohen's (1988) categories for interpreting the magnitude of effect sizes.

Pre-Test Survey Data

Table 4.3 presents the pre-test means, number of participants, standard deviations, and standard error means of Writing Perceptions and Transfer Perceptions. These findings were aligned with Research Question 1 to compare students' perceptions of writing and of transfer at the beginning of the semester. Table 4.3 indicates pre-test Writing Perceptions ($M = 13.76$, $SD = 2.34$) and pre-test Transfer Perceptions ($M = 17.16$, $SD = 1.93$).

Table 4.3 Pre-Test Means, Number of Participants (N), Standard Deviations (SD), and Standard Error of the Mean (SEM)

Perceptions	Mean	N	SD	SEM
Writing	13.76	*191	2.34	.17
Transfer	17.16	*191	1.93	.14

Note: The number of respondents who completed these two groups of four questions for the pre-test was less than the overall respondents who completed the pre-test ($n = 199$).

Table 4.4 presents the paired differences of the pre-test level of means, standard deviations, standard error of the mean, the t -test value, degrees of freedom, and level of significance of Writing Perceptions and Transfer Perceptions. Table 4.4 indicates a mean difference in the scores of Writing Perceptions and Transfer Perceptions ($M = -3.40$, $SD = 2.58$). The standard error of the mean was .19. The findings indicated a significant level of difference,

$t(190) = -18.21; p < .001$.

Table 4.4 Pre-Test Paired Mean Difference, Standard Deviation (*SD*), Standard Error of the Mean (*SEM*), *t*-Test Value, Degrees of Freedom (*df*), and Level of Significance (*p* Value)

Pair	Mean Difference	<i>SD</i>	<i>SEM</i>	<i>t</i>	<i>df</i>	Sig. (2-tailed)
Writing Perceptions & Transfer Perceptions	-3.40	2.58	.19	-18.21	190	.001

To determine the effect size of the significant results, the researcher administered Cohen's *d* statistical test (see Appendix J). Cohen's (1988) categories for interpreting the magnitude yielded a large effect size of 1.588. Thus, the findings indicate that the differences between the means and standard deviations of each group are not only large enough to exceed chance but also large enough to indicate a useful difference. The effect of students' transfer perceptions ($M = 17.16$) was of greater magnitude than their writing perceptions ($M = 13.76$).

Post-Test Survey Data

Table 4.5 presents the post-test means, number of participants, standard deviations, and standard error of the means of Writing Perceptions and Transfer Perceptions. These findings were aligned with Research Question 1 to compare students' perceptions of writing and of transfer at the end of the semester. Table 4.5 indicates post-test results of Writing Perceptions ($M = 13.92$, $SD = 2.39$) and post-test results of Transfer Perceptions ($M = 16.21$, $SD = 2.32$).

Table 4.5 Post-Test Means, Number of Participants, Standard Deviations (*SD*), and Standard Error of the Means (*SEM*)

Perceptions	Mean	<i>N</i>	<i>SD</i>	<i>SEM</i>
Writing	13.92	*190	2.39	.17
Transfer	16.21	*190	2.32	.17

Note: The number of respondents who completed these two groups of four questions for the post-test was less than the overall respondents who completed the post-test ($n = 194$).

Table 4.6 presents the paired differences of the post-test level of mean, standard deviation, standard error of the mean, the *t*-test value, degrees of freedom, and level of significance between Writing Perceptions and Transfer Perceptions. Table 4.6 indicates a mean difference in the scores of Writing Perceptions and Transfer Perceptions ($M = -2.29$, $SD = 2.63$). The null hypothesis was rejected. The findings indicate a significant level of difference, $t(189) = -12.01$; $p < .001$. The paired-samples *t*-test revealed a significant difference at $p < .01$ between the pre-test Writing Perceptions and Transfer Perceptions (.001).

Table 4.6 Post-Test Paired Mean Difference, Standard Deviation (*SD*), Standard Error of the Mean (*SEM*), *t*-Test Value, Degrees of Freedom (*df*), and Level of Significance (*p* Value)

Pair	Mean Difference	<i>SD</i>	<i>SEM</i>	<i>t</i>	<i>df</i>	Sig. (2-tailed)
Writing Perceptions & Transfer Perceptions	-2.29	2.63	.19	-12.01	189	.001

Cohen's d was applied to find the effect size of the post-test paired differences because the findings indicated a significant level of difference. The results of Cohen's d for the post-test reported a large effect size of 0.972, indicating a difference between the two groups large enough and consistent enough to be important on a practical level. The effect of students' transfer perceptions ($M = 16.21$) was of greater magnitude than their writing perceptions ($M = 13.92$).

Focus Group Data

A descriptive analysis of the qualitative data revealed three emerging themes that support the study's research questions: a growing awareness of the conventions of academic discourse, preparation for collegiate and vocational writing, and self-improvement in specific areas of proofing and editing (see Appendix F).

As seen in Table 4.1, the qualitative element of the study designed to address Research Question 1 includes Focus Group Questions 4, 5, 6, 8, 9, and 10 with the emerging theme of a growing awareness of the conventions of academic discourse and its subthemes. The qualitative element of this test yielded the following responses to Research Question 1.

To answer Focus Group Question 4 (Do you expect skills learned in FYC to help with professional writing?), several respondents explained they could apply the writing conventions required in Composition I class to writing résumés, creating scripts, and theorizing with archeological facts. Focus Group Question 5 (How important is it to know the rules of writing in your college writing?) revealed that students believed what they learned in FYC was important to the writing expected in Composition II, an area of transfer expected by composition instructors. When answering Focus Group Question 6 (What are some of the important habits of writing?), students may not have used the technical terminology of "conventions of academic discourse"

(Focus group participants, personal communication, March 31, 2014). Yet, several respondents did point out that outlining, focus, transitional phrases, and researching are important habits of writing. Responses such as the course “totally changed the way I edit and review papers” indicated an important difference in perception at the end of the semester (Focus group participants, personal communication, March 31, 2014).

Focus Group Question 8 (Name a learning experience that has prepared you for college writing.) revealed that several experiences, such as learning the difference between synthesis and rhetorical analysis as well as learning to detect wordiness in their own writing, prepared students for collegiate writing. When posed with Focus Group Question 9 (Name a learning experience that has prepared you for writing beyond college.), several students agreed that taking criticism from peers to find errors in their writing was the learning experience they valued most. Focus Group Questions 8 and 9 addressed areas of self-awareness that seem to enhance the theme of Research Question 1: awareness of conventions of discourse.

Students added little information to Focus Group Question 10 (What would make the course more valuable to you?). Their ideas included creating a script and writing more papers. Overall, Focus Group Question 10 added limited insight to support Research Question 1. However, the participants’ awareness of the conventions of academic discourse may indicate an ability to identify writing strategies that would improve their writing in other contexts.

Summary of Findings for Research Question 1

In all, the quantitative data for Research Question 1 revealed statistically significant findings which indicated substantial differences between the two groups. These differences suggest that students’ perceptions of their ability to transfer writing skills were stronger than

their perceptions of their writing skills. The researcher will explore interpretations of these findings in Chapter V.

Analysis of Data for Research Question 2

For the analysis of Research Question 2 (How do first-year students rate their ability to transfer knowledge about writing from the FYC course to other courses and contexts?), the researcher first determined that Survey Statements 3, 4, 12, and 14 (Transfer Perceptions) addressed this question. Descriptive statistics were then conducted to address the pre- and post-test results of Transfer Perception. The findings were analyzed to address how FYC students rated their ability to transfer knowledge about writing. The focus group results were analyzed to determine the extent to which the qualitative data enhanced the quantitative data.

Survey Data

Table 4.7 presents the findings of the descriptive statistics for the pre- and post-tests of Transfer Perceptions, number of participants, minimum and maximum scores, median scores, mean scores, and standard deviations. The results of the descriptive statistics show the characteristics of the findings for the pre- and post-test statements aligned with Transfer Perceptions. Table 4.7 reveals the mean score for the pre-test ($M = 17.16$, $SD = 1.94$) and the mean score for the post-test ($M = 16.19$, $SD = 2.33$). The mean scores indicated that at the end of the semester students would be less likely to transfer the knowledge gained in FYC to other situations. Interpretations of these findings will be provided in Chapter V.

Table 4.7 Descriptive Statistics for Pre- and Post-Tests of Students' Perceptions of Transfer (Survey Statements 3, 4, 12, 14)

Transfer Perceptions	<i>N</i>	Minimum	Maximum	Median	Mean	<i>SD</i>
Pre-Test	*198	12.00	20.00	17.00	17.16	1.94
Post-Test	*191	4.00	20.00	16.00	16.19	2.33

Note: The number of respondents who completed these four questions on the pre- and post-tests was different from the respondents who completed the pre-test ($n = 199$) and post-test ($n = 194$).

Focus Group Data

The qualitative element of the study yielded substantial supportive responses. As seen in Table 4.1, the qualitative dataset designed to address Research Question 2 included Focus Group Questions 4, 5, 7, 8, 9, and 10 with the emerging theme of preparation for collegiate and vocational writing and its subthemes.

Respondents answered Focus Group Question 4 (Do you expect skills learned in FYC to help with professional writing?) by explaining how they applied the writing conventions required in Composition I to writing résumés, creating scripts, and theorizing with archeological facts. Focus Group Question 5 (How important is it to know the rules of writing in your college writing?) revealed that students believed what they learned in Composition I was important to the writing expected in Composition II, an area of transfer expected most by composition instructors. To answer Focus Group Question 7 (What are the most important skills for college and beyond?), several respondents pointed out that knowing the rules of writing, such as conveying the appropriate tone, considering audience, and choosing proper diction (e.g. affect/effect) were some of the most important skills. Students highly rated their ability to

transfer or use knowledge in other domains, an indication that the focus group responses addressed Research Question 2.

Focus Group Question 8 (Name a learning experience that has prepared you for college writing.) prompted students to mention that the thoroughness of the FYC teacher to point out errors in diction helped them in other courses (such as history and archeology) when the professors expected them to correct commas and avoid wordiness. One respondent remarked that the skills learned in FYC helped her to successfully enter the education program.

Confidence in their writing was another area of experience that several students agreed the FYC course emphasized. When asked Focus Group Question 9 (Name a learning experience that has prepared you for writing beyond college.), students asserted that peer-reviewing and the teacher walking them through the process were the learning experiences that prepared them for writing beyond college. Focus Group Questions 8 and 9 addressed areas of learning transfer that seem to support the theme of Research Question 2. To answer Focus Group Question 10 (What would make the course more valuable to you?), students suggested creating a script or writing more papers. Overall, Focus Group Question 10 added limited information to respond to Research Question 2.

Summary of Findings for Research Question 2

The results of the pre-test mean scores indicated no obvious departure from normality. The distribution of the results for the post-test indicated that students' perceptions of their ability to use what they had learned in their FYC courses had decreased somewhat at the end of the semester. However, the qualitative data provided more positive perspectives of the relationship

between students' ratings of their writing skills and their ability to transfer those skills.

Interpretations of the findings will be discussed in more detail in Chapter V.

Analysis of Data for Research Question 3

For the analysis of Research Question 3 (Do students' ratings of their ability to transfer learning change from the beginning of the FYC course to the end of the course? If so, in what direction?), paired-samples *t*-tests were conducted on the pre- and post-test results of Survey Statements 1-15. These findings were aligned with Research Question 3 to determine students' perceptions concerning their writing abilities and their ability to transfer those skills to other situations.

Survey Data

Table 4.8 illustrates the pre- and post-test means, levels of mean difference, *t*-test values, degrees of freedom, and levels of significance of Survey Statements 1-15. The large number of comparisons required the *t*-test outcomes be compared to a modified alpha level using the Bonferroni (1950) adjustment to reduce the chances of obtaining false-positive results. This adjustment was used to establish the corrected alpha level before the *t*-tests were conducted ($p < .05/15$ or $.003$). After the correction, Survey Statements 3 and 12 showed significance at the adjusted level of $p < .003$. A descriptive analysis of the results follows Table 4.8.

Table 4.8 Pre- and Post-Test Means, Levels of Mean Difference, *t*-Test Values, Degrees of Freedom (*df*), and Levels of Significance (*p* Values) of Survey Statements 1-15

Survey Item	Pre-Test Mean	Post-Test Mean	Mean Difference	<i>t</i>	<i>df</i>	Sig. (2-tailed)
S1	3.58	3.64	-.06	-0.85	106	0.399
S2	4.40	4.50	-.09	-1.09	106	0.277
S3	4.58	4.31	.27	3.58	106	0.000*
S4	4.49	4.31	.18	1.86	106	0.066
S5	4.17	4.24	-.08	-0.77	106	0.444
S6	2.94	2.94	.00	0.00	106	1.000
S7	2.23	2.38	-.15	-1.76	106	0.081
S8	4.01	3.94	.07	0.77	106	0.445
S9	4.43	4.46	-.03	-0.31	106	0.755
S10	3.09	3.05	.05	0.52	106	0.603
S11	3.72	3.85	-.13	-1.42	106	0.158
S12	3.94	3.42	.52	5.30	106	0.000*
S13	2.08	2.28	-.03	-2.34	106	0.021
S14	4.15	4.06	.09	1.32	106	0.190
S15	4.28	4.37	-.09	-1.30	106	0.198

*Note: Statements 3 and 12 revealed have significant differences after the Bonferroni adjustment was applied.

Descriptive Analysis of Significant Items

For Survey Statement 3 (I expect what I learn about writing strategies in my English 1010/1011 course to help me with writing in other courses.), the mean score decreased from 4.58 (*SD* = .55) on the pre-test to 4.31 (*SD* = .68) on the post-test. The difference between the two

means was found to be statistically significant at the corrected level of .003 ($t = 3.58$, $df = 106$, $p < .001$).

For Survey Statement 12 (I expect my English 1010/1011 course to help me write in my major.), the mean score decreased from 3.94 ($SD = .90$) on the pre-test to 3.42 ($SD = .85$) on the post-test. The difference between the two means was found to be statistically significant at the corrected level of .003 level ($t = 5.30$, $df = 106$, $p < .001$).

Quantifying the effect size can help to determine the importance of that effect (Field, 2009). Cohen's d was applied to find the effect size of the significant items (see Appendix J). Based on Cohen's (1988) categories for interpreting the magnitude of effect sizes, Statement 3 is considered an intermediate effect (0.44), and Statement 12 is considered a strong effect (0.59). The difference between the pre- and post-tests was negative, indicating that students' perceptions were weaker at the end of the semester. Several studies have suggested that decision-making and judgments may be influenced by overconfidence (Hubbard, 2014; Kahneman, 2011; Plous, 1993; Thaler, 2015). This theory will be discussed in more detail in Chapter V.

Focus Group Data

The qualitative element of the study addressed Research Question 3 through the emerging theme of improvement in specific areas of proofreading and editing skills as well as its subthemes which were discovered in Focus Group Questions 1, 2, and 3. Research Question 3 focuses on the shift of student ratings of their ability to transfer learning from the beginning of the FYC course to the end and the direction of the difference, if any were to occur.

In response to Focus Group Question 1 (What writing skills did you expect to learn?), several students pointed out that they were "learning proper college-level writing" (Focus group

participant, personal communication, March 31, 2014). This description may support the notion that students are making positive connections between what they learn in FYC and the writing required in other courses. Students must understand that the writing process learned in FYC will be required by professors other than English instructors. By recording students' expectations of FYC, the researcher was able to gather some important insight into Research Question 3.

For Focus Group Question 2 (What writing skills did you learn?), respondents asserted that, at the end of the semester, they were concerned with properly constructing citations, catching grammatical and mechanical errors, such as run-ons and commas, using transitional phrases, finding mistakes, and omitting redundancy. These were skills they believed they learned in 1010/1011. One student acknowledged that he needed to revise more than he originally thought, an example of self-awareness. This indication of self-efficacy addressed the issue of students' ratings from the beginning to the end of the semester.

When answering Focus Group Question 3 (What writing habits did you acquire?), several students indicated that, at the end of the semester, they were concerned with "properly citing," "catching grammatical errors like ROs [run-on sentences] and commas," "using transitional phrases," "finding mistakes," and "taking out words that mean the same thing" (Focus group participants, personal communication, March 31, 2014). By recording students' views of their writing habits at the end of the semester, Focus Group Questions 2 and 3 seemed to support Research Question 3.

Summary of Findings for Research Question 3

Two quantitative items, Survey Statements 3 and 12, revealed statistically significant differences between the pre- and post-test means. Based on the negative direction of the

differences, these findings indicate that students' perceptions of their writing and of transfer were stronger at the beginning of the semester than at the end of the semester. In the context of this study, a large effect size implies that the difference between the two groups was large enough and consistent enough to provide insight into how students view their ability to apply knowledge gained in FYC to their majors (Statement 3) and to their vocations (Statement 12). The qualitative data revealed several examples that addressed the focus of Research Question 3.

Analysis of Data for Research Question 4

For Research Question 4 (Based on their reported major area of study, is there a difference in students' perceived ability to transfer knowledge from FYC to other courses and contexts?), the researcher chose the one-way analysis of variance (ANOVA) to accommodate the number of groups being compared. ANOVA examines the null hypothesis to show that all group means are equal (F -ratio). Two ANOVAs were conducted: one for the pre-test results of Transfer Perceptions and a second for the post-test results of Transfer Perceptions. A third test was conducted on reported major areas of study (see Table 4.9).

Description of Students' Reported Major Areas of Study

Table 4.9 compares the number of major areas of study for the survey participants ($n = 197$) to the number of corresponding major areas of study for the university population ($n = 5,402$). The total population of the university for Fall 2013 was $N = 10,660$. This information was gathered from the *UTC Fact Book* (2014) found on the university website. The five areas of study were categorized using similar courses of study and colleges. These data were aligned to

Research Question 4 to determine the relationship between students' reported major areas of study and their perceptions of transfer.

Table 4.9 Number and Percentage of Reported Major Areas of Study for Survey Participants and the University Population with Corresponding Majors (Fall 2013)		
Reported Major Areas of Study	<i>n</i> and % of Survey Participants	<i>n</i> and % of University Students
Biology/Health Professions (Health & Human Performance, Nursing)	70 (35.53%)	1322 (12.40%)
Business (Marketing, Management, Entrepreneurship, Accounting)	38 (19.29%)	610 (5.72%)
Social Sciences (Psychology, Social Work, Communication, Economics, Education)	34 (17.26%)	2296 (21.54%)
Engineering & Computer Science/Mathematics/Chemistry/Physics	19 (9.65%)	452 (4.24%)
Humanities (History, Visual & Performing Arts, Languages)	11 (5.58%)	205 (1.92%)
Undecided	25 (12.69%)	517 (4.85%)
Note: Information taken from <i>UTC Fact Book</i> (2014). Survey <i>n</i> = 197 (participants who indicated a major); University <i>n</i> = 5,402 university students with majors matching survey participants; University <i>N</i> = 10,660 indicates total university population (Fall 2013).		

As shown in Table 4.9, the survey sample may not be considered typical and is not representative of this university's student majors at the first-year level. The indicated majors of the participants represent a portion of the university's student population. For this reason, the demographic information may not be used to generalize the data collected with these surveys.

Pre-Test Survey Data

Table 4.10 presents ANOVA pre-test results, including the sums of squares, degrees of freedom, mean squares, *F*-ratio, and levels of significance for Transfer Perceptions (Survey Statements 3, 4, 12, and 14) compared with students' indicated majors. These findings were aligned with Research Question 4 to determine students' perceptions concerning transfer based on their reported major areas of study. As indicated in Table 4.10, no statistically significant difference between the group means of the pre-test results of Transfer Perceptions and the reported areas of study were revealed at the $p < .05$ level for the six conditions, $F(5, 186) = 2.16$, $p = .061$.

Table 4.10 ANOVA Results for Pre-Test Transfer Perceptions, Sums of Squares (<i>SS</i>), Degrees of Freedom (<i>df</i>), Mean Squares (<i>MS</i>), <i>F</i> -Ratio, and Level of Significance (<i>p</i> Value)					
Pre-Test Perceptions	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	Sig. (<i>p</i> Value)
Between Groups	39.55	5	7.91	2.16	.061
Within Groups	682.32	186	3.67		
Total	721.87	191			

Post-Test Survey Data

Table 4.11 presents ANOVA post-test results, including the sums of squares, degrees of freedom, mean squares, *F*-ratio, and levels of significance of Transfer Perceptions (Survey Statements 3, 4, 12, and 14) compared with students' indicated majors. These findings were aligned with Research Question 4 to determine students' perceptions concerning transfer based on their reported major areas of study. As indicated in Table 4.11, no statistically significant

difference between the group means of the post-test Transfer Perceptions and the reported areas of study were revealed at the $p < .05$ level for the six conditions, $F(5, 180) = 1.01, p = 0.414$.

Table 4.11 ANOVA Results for Post-Test Transfer Perceptions, Sums of Squares (<i>SS</i>), Degrees of Freedom (<i>df</i>), Mean Squares (<i>MS</i>), <i>F</i> -Ratio, and Level of Significance (<i>p</i> Value)					
Post-Test Perceptions	<i>SS</i>	<i>df</i>	<i>MS</i>	<i>F</i>	Sig. (<i>p</i> Value)
Between Groups	27.94	5	5.59	1.01	.414
Within Groups	996.88	180	5.54		
Total	1024.82	185			

Focus Group Data

The qualitative element of the study addressed Research Question 4 through the emerging theme of preparation for collegiate and vocational writing and its subthemes as discovered in Focus Group Questions 3, 4, and 5. Research Question 4 addressed student dispositions and their perceived ability to transfer what they have learned to other domains based on their reported areas of study.

When asked Focus Group Question 1 (Do you expect to use the skills learned in FYC to help you in your course of study?), one respondent assessed the knowledge gained in FYC as “one of the valuable lessons I learned” (Focus group participant, personal communication, March 31, 2014). The student pointed out that this knowledge had been applied to the writing required as a theater major, specifically, writing scripts. Other respondents tied the theme of preparation to the writing required in history courses and to the realm of business, acknowledging that

“sending out professional emails” would be essential (Focus group participant, personal communication, March 31, 2014).

In answer to Focus Group Question 4 (Do you expect to use the skills used in FYC to help you in your professional writing?), several participants indicated they had gained an awareness of writing for an academic audience as well as a foundation for writing professionally in fields such as medicine. Several responses to Focus Group Question 5 (Do you feel it is important to know the habits of writing?) revealed that students were motivated to learn habits of good writing, including constructing a working thesis, supporting a claim, and using an appropriate voice.

Summary of Findings for Research Question 4

The ANOVA results revealed no significant difference between students’ reported major areas of study and students’ perceptions of transfer. For this reason, post hoc tests were not conducted. The qualitative data contributed to Research Question 4 by addressing the notion that students’ dispositions are connected to their perceived ability to transfer knowledge. Interpretations of the qualitative data as well as some possible interpretations of the insignificant quantitative findings will be discussed further in Chapter V.

Summary of the Chapter

Chapter IV provides a description of the mixed methodologies used to conduct the research to support this study. These datasets and the subsequent descriptive analyses support the conclusions, implications, and recommendations of Chapter V. The results of the quantitative portion of the study allowed for the following general conclusions. For Research

Question 1, *t*-tests comparing pre-test Writing Perceptions and pre-test Transfer Perceptions revealed statistically significant results. Similarly, *t*-tests comparing post-test Writing Perceptions and post-test Transfer Perceptions revealed statistically significant results. In the context of this study, these findings suggest a negative difference in students' perceptions from the beginning to the end of the semester. This information could inform how instructors of English design their courses by emphasizing self-awareness of writing skills and transferring the use of those skills to their majors and vocations.

To analyze Research Question 2, descriptive statistics were conducted on the pre- and post-test survey statements aligned with Transfer Perceptions (Survey Statements 3, 4, 12, and 14). The survey data revealed a normal distribution of the results. Qualitative data were also gathered using focus group sessions. Of the two datasets, the focus groups provided more insightful data to address Research Question 2.

For the analysis of Research Question 3, *t*-test outcomes, based on the Bonferroni (1950) adjustment comparing pre- and post-test Survey Statements 1-15, revealed two statistically significant items, Statements 3 and 12. The effect size for each item was substantial. Statement 3 is considered an intermediate effect (0.44), providing evidence of a statistically significant difference. This effect indicates that, at the end of the semester, students' expectations were somewhat weaker concerning their ability to write in other courses. Statement 12 is considered a strong effect (0.59), indicating a statistically significant difference. This effect indicates that, at the end of the semester, students' expectations of their ability to write in their majors had weakened to some degree. A didactic interpretation might infer that students were more aware of their writing weaknesses and had a more realistic view of their writing abilities after receiving instruction. These findings most clearly addressed the focus of Research Question 3.

To investigate Research Question 4, the researcher chose a one-way ANOVA to analyze the pre-test results of Transfer Perceptions and post-test results of Transfer Perceptions based on students' reported major areas of study. These data revealed no statistically significant findings on the pre- or post-test, indicating that students' reported major areas of study may not have affected students' perceptions of their ability to transfer knowledge gained in FYC.

In all, the quantitative results demonstrated some supporting evidence for the hypotheses of Research Questions 1 and 3. In contrast, the results demonstrated insufficient evidence for the hypotheses of Research Questions 2 and 4; therefore, the null hypotheses of these questions must be accepted. The qualitative element of the study was limited in its effect because of the sample of participants; however, the more substantial results of the quantitative element of the study enhanced the researcher's understanding of the research questions.

CHAPTER V

CONCLUSIONS

General Discussion of the Study

The purpose of this study was to gather data to investigate if first-year college students believed they would use the knowledge learned in FYC in writing for other courses, in their majors, and in their future vocations. The study held particular interest to the researcher because the Composition Department of UTC, where the researcher is a faculty member, conducted a study investigating students' perceptions of their ability to transfer the skills and knowledge learned in FYC courses.

The researcher chose a mixed methods study, using both quantitative and qualitative data-gathering methods, to examine students' perceptions. The primary findings emerging from this study were derived from four guiding research questions:

1. What is the relationship between students' judgments about their writing and their ability to use those strategies in other courses and contexts?
2. How do first-year students rate their ability to transfer knowledge about writing from FYC course to other courses and contexts?
3. Do students' ratings of their ability to transfer learning change from the beginning of the FYC course to the end of the course (one semester)? If so, in what direction?
4. Based on their reported major areas of study, is there a difference in students' perceived ability to transfer knowledge from FYC to other courses and contexts?

The principal quantitative dataset, mined from an existing Composition Survey, was developed initially as part of a departmental study conducted in the academic year 2013-14.

Subsequent to the administration of the surveys, the qualitative dataset was gathered in focus group sessions. The responses were transcribed and coded to further examine the perceptions of the participants and to gather information that might clarify areas addressed on the surveys or to amend areas not addressed on the surveys.

Data gathered from paired-samples *t*-tests demonstrated statistically significant findings for Research Question 1 and for two quantitative statements for Research Question 3. Other results demonstrated no significant differences, implying that most students' perceptions of the statements remained unchanged at the end of the semester. For some items, the incremental differences indicated expected findings; for other items, the incremental differences indicated problematic findings. In both cases, the data could direct the academy to design more effective pedagogical and assessment practices. For example, although the findings indicated no significant differences, the results of Statement 14, which addressed students' expectations of using the knowledge learned in FYC beyond college, remained within the Agree category. This finding could inform the implementation of pedagogical practices that focus on writing strategies and confidence levels of students.

The analysis of the qualitative data illustrated a relationship of how students perceived the writing strategies they learned in FYC and how they used the writing strategies in other courses and in their majors. Several recurring themes regarding student's perceptions of their FYC courses were determined: a growing awareness of the conventions of academic discourse; preparation for collegiate and vocational writing; and improvement in specific areas of proofreading and editing skills, specifically, logical transitioning, correcting run-ons, choosing the appropriate word, citing sources properly, and conciseness. The focus group responses clarified the survey findings by providing needed details and specific examples of students'

perspectives of the FYC course. These findings could be used to inform a more transfer-focused design of FYC.

Chapter V details the interpretation of the findings as they relate to the study's guiding research questions, the recommendations for further practice in the academy and in composition pedagogy, and the conclusions that were established as a result of the study.

Interpretation of Findings

By focusing on the results detailed in Chapter IV, this portion of the study outlines how the data provided opportunities to analyze the study's four guiding research questions. The implications of the quantitative data findings of the research questions will be addressed followed by the implications of the qualitative findings.

Implications of the Data on the Research Questions

The quantitative findings of this research study were based on analyses of data collected with the pre- and post-semester Composition Surveys (2013-14) administered to first-year students at the University of Tennessee at Chattanooga. To determine the level of significance of the results, three modes of analysis were applied: paired-samples *t*-tests, descriptive statistics, and analysis of variance (ANOVA). Although the data showed limited appreciable differences in the pre- and post-test responses, the findings did support the research questions in meaningful ways.

Research Question 1

The findings for Research Question 1 (What is the relationship between students' judgments about their writing and their perceived ability to use those strategies in other courses and contexts?) yielded significant differences. The pre-test compared two groups of survey statements: one group was mapped to Writing Perceptions and the other group was mapped to Transfer Perceptions. The pre-test revealed that at the beginning of the semester students had stronger perceptions of their writing ability than of their ability to transfer writing strategies learned in FYC to other courses and contexts. Similarly, the post-test revealed that at the end of the semester students continued to view their writing ability more strongly than their ability to transfer writing strategies learned in FYC to other courses and contexts. Although students' perceptions of writing were stronger than their perceptions of transfer, the tests indicated that students did believe the course had prepared them for collegiate writing and writing beyond college. These relevant findings provided insight into the relationship between students' perceptions of writing and transfer.

Developed to further illuminate and enhance the survey responses, the focus group questions also provided data for answering the research questions. Research Question 1 focused on the relationship between students' judgments about their writing and their perceived ability to use those strategies. A more thorough discussion of the focus group responses is presented in Appendix F. The emerging theme of a growing awareness of the conventions of academic discourse and its subthemes were aligned with Research Question 1. Respondents indicated that they must achieve college-level writing, a notion that indicates that students are connecting what they learned in FYC to the level of writing required in other courses. Understanding that the writing skills learned in FYC will be required by professors in areas other than English is an

important area of transfer. These findings could be used to construct more effective composition courses that focus not only on teaching writing skills but also on transferring those skills.

Clarification for Research Question 1 was provided by student comments concerning writing conventions learned in FYC that will be needed after college. Pre-writing strategies, such as outlining, considering audience and voice, and constructing thesis statements, were considerations that students believed were essential to academic writing. Their awareness of these rhetorical concepts and of other conventions of academic discourse may indicate an ability to identify writing strategies that might be used to improve their writing in other contexts. Students also mentioned time management and professionalism in writing emails and memos as skills learned in FYC. The responses supported the notion that FYC had prepared students for other types of collegiate writing and for writing beyond college. This information could prove relevant and insightful for English composition instructors as they mindfully design FYC assignments to prepare students to write in various fields of study, such as business, biological sciences, engineering, and social sciences.

Research Question 2

For Research Question 2 (How do first-year students rate their ability to transfer knowledge about writing from the FYC course to other courses and contexts?), the Neither Disagree Nor Agree response was the most common level for both pre- and post-test findings. These results indicated a feeling of ambivalence or a lack of certainty concerning the ability to transfer knowledge gained in FYC to other types writing. This aspect of the findings could be problematic in that one of the goals of most composition instructors is to help students prepare for the writing they will be asked to do in other courses and contexts. This result raises the

question: How can instructors help students better understand the relevance of the knowledge and skills learned in FYC?

The findings indicated that, after taking the course, students were unsure if the course would help them with writing in their majors. Most English departments and instructors want students to perceive how the composition course will help them write in their majors, making this result critical. One explanation for the incremental difference is that a clearer understanding of the Neither Disagree Nor Agree is needed. The researcher has also noted that some FYC students indicate they have few papers required in other classes; therefore, in some cases, students have not had the opportunity to use what they have learned in FYC in other situations. Given this circumstance, the Neither Disagree Nor Agree is a reasonable response. Although students have not yet used the writing skills taught in FYC, composition instructors must clarify the relevance of FYC to first-year students majoring in courses of study other than English by connecting concepts, including appropriate word choice, organization and thesis writing, clarity, development, and coherence.

The focus group responses for Research Question 2 revealed the emerging theme of preparation for collegiate and vocational writing and its subthemes. The responses to Focus Group Questions 4 (Do you expect skills learned in FYC to help with professional writing?), 5 (How important is it to know the rules of writing in your college writing?), and 7 (What are the most important skills for college and beyond?) suggested they applied the writing conventions required in FYC course to writing résumés, creating scripts, and theorizing with archeological facts. Each of these applications of knowledge are expected by composition instructors. Several students pointed out that knowing the rules of writing, such as conveying the appropriate tone, considering audience, and choosing proper diction (affect/effect), were important skills. These

responses provided evidence that students believed their FYC course prepared them for writing activities they will face in the future.

Focus Group Questions 8 (Name a learning experience that has prepared you for college writing.) and 9 (Name a learning experience that has prepared you for writing beyond college.) prompted students to discuss the experiences, such as the thoroughness of the teacher to point out errors in diction (i.e., word choice). Although this observation alone does not imply that students were able to find errors in their diction, the awareness of the stylistic issue of appropriate word choice could indicate they were more aware of their own writing challenges, an important element of transfer. Other experiences students described were peer-reviewing by classmates and an emphasis on the writing process by instructors. These comments seem to promote the importance of instructor emphasis on transfer.

The responses to Focus Group Question 10 (What would make the course more valuable to you?) addressed Research Question 2 in a limited way. One student suggested that more writing could have been assigned. However, the prevailing attitude was that the course had “set up a foundation for [their] writing” (Focus group participant, personal communication, March 31, 2014). The researcher was encouraged by responses that indicated the course fulfilled its fundamental goals. Considered as a whole, the focus group responses to Research Question 2 demonstrated an appreciation for the FYC instructors and the course.

Research Question 3

Research Question 3 (Do students’ ratings of their ability to transfer learning change from the beginning of the FYC course to the end of the course [one semester]? If so, in what direction?) was addressed by Survey Statements 1-15 (see Appendix H). Survey Statements 3

and 12 indicated statistically significant differences. Although the majority of the findings revealed no significant differences, the researcher observed relevant and meaningful interpretations in these data as they relate to Research Question 3. These findings support the notion that, in some cases, an incremental difference vindicates the mode of FYC instruction. The findings may also imply that students believed FYC courses provided skills needed in other courses.

The following section will address significant findings, implications of other findings, and focus group responses.

Significant Findings

For Survey Statement 3 (I expect what I learn about writing strategies in my English 1010/1011 course to help me with writing in other courses.), the result revealed a statistically significant difference. The researcher expected the overall opinion of students to increase with time; however, the pre-test mean score decreased slightly to the post-test mean score, remaining within the Strongly Agree category.

This finding is relevant to the study in that it could be used to clarify the need of teaching to transfer, thereby encouraging practical courses of action. This result essentially supports the concepts of self-regulation and controlling one's own actions, or internalization (Kopp, 1982). Within this framework, the learner is considered the meaning-maker. The learner's personal knowledge becomes the goal of learning (Airasian & Walsh, 1997). Students must be encouraged to make the connection between using the writing strategies of a thesis statement and logical transitions in a variety of genres, such as an argumentation paper for history or scientific writing for biology class.

The diminished post-test scores may be clarified by the notion of initial overconfidence as it relates to general knowledge. At the beginning of the semester, students may have overestimated the level to which they expected to use the knowledge acquired in FYC. These skills are considered general in that the information is intended to be applied to a variety of writing situations. Studies have shown that “general knowledge items seem to produce relatively high degrees of overconfidence” (Plous, 1993, p. 219). These findings provided much-needed insight into student responses.

The result for Survey Statement 12 (I expect my English 1010/1011 course to help me write in my major.) revealed a statistically significant difference. The difference indicated that, after taking the course, students moved from the Agree category to the Neither Disagree Nor Agree category, a negative movement numerically. The researcher’s preconception was that the overall opinion of students would increase with time. However, at the end of the semester, the average score was lower than at the beginning. Students may have given a positive response at the beginning of the semester and a more measured response at the end. Another possible clarification is that students became equivocal about the degree to which FYC would help them in their majors, meaning that, after taking the course, students questioned how the knowledge and skills taught in FYC would help them.

The motivation for the responses to Statements 3 and 12 may lie in the theory that people have a “natural overconfidence” in their abilities (Hubbard, 2014, p. 104). In addition, overconfidence has been associated with overestimating one’s ability to be correct (Hubbard, 2014). It is common for individuals not only to overestimate their ability to use past knowledge but also “to exaggerate [the] ability to forecast the future, which fosters optimistic overconfidence” (Kahneman, p. 255).

Judgments may also be obscured by complex situations (Plous, 1993). At the beginning of the semester, students may have struggled to accurately judge the knowledge they would learn in FYC and whether they would use that knowledge in other domains. Following one semester of instruction, students may have gained a clearer perception of these areas of knowledge. Although the outcomes may seem unexpected in some respects, they may, in fact, be valuable in promoting improved writing. In future studies that employ “the human mind as a measurement instrument,” researchers will need to explore the mind’s “strengths while adjusting for its errors” (Hubbard, 2014, p. 307). Studies conducted by Koriat, Lichtenstein, and Fischhoff (1980) found that overconfidence could be reduced with a focus on metacognition, or considering why one chose the wrong answer (as cited in Plous, p. 228). This is similar to the formal technique of calibration described by Hubbard (2014) and Thaler (2015).

These findings may reveal that students became more realistic in their assessments of their writing and transfer abilities after gaining insight into their own inadequacies. In addition, students may have felt affirmative responses were expected of them rather than truthful, objective responses. Plous (1993) asserted that “one can avoid skewed thinking by considering a variety of viewpoints, whether they may be perceived as positive or negative” (p. 229).

The result of Survey Statement 12 could inform how FYC instructors prepare students for writing in their majors. Understanding that students may not be confident in their ability to transfer could provide the impetus for modifying teaching methods to focus on transfer. Congruent with the literature, this study supports research that shows the ability of students to reflect on their own work is important not only for improving writing skills for educational purposes but also for developing writing for professional environments (Argyris & Schon, 1974; Schön, 1983, 1987).

Implications of Other Findings

Survey Statements 1 (I am a good writer.), 6 (I enjoy writing.), and 8 (I expect my teacher to edit my writing.) focused on students' self-perceptions of their writing. These statements focused on differing areas of self-efficacy. The results for Statement 1 remained within the Agree level and can be considered a promising outcome. Students indicated a similar level of perception at the end of the semester within the Agree category, reflecting a perception of themselves as good writers. However, it is possible that this perception indicated an exaggerated opinion of their abilities at the beginning of the semester, underscoring the need for a clearer understanding of their level of writing. No statistically significant difference was demonstrated for Statement 6 within the Neither Disagree Nor Agree response level, an unexpected finding. The researcher's preconception was that students who thought they did not enjoy writing at the beginning of the semester would find it more enjoyable by the end of the semester. One possible interpretation is that, after fifteen weeks of learning the rudiments of writing, students more clearly understood the level of discipline the art of writing requires. The focus group responses support this finding. For these participants, writing produced a feeling of equivocality.

The mean for Statement 8 remained within the Agree category, an ambiguous finding. Dependence on composition instructors to provide editing support may prove problematic if students transfer this expectation to all writing projects. However, if students have a healthy expectation of guidance through the revision process, they can learn to proof and edit more independently. The findings beg a two-fold response: First of all, at the beginning of the semester, students should feel they can anticipate support from their instructors for guidance in FYC. Secondly, by the end of the semester, students should have learned to manage their own

drafting issues for future writing tasks. These findings could be considered a warning to instructors to be balanced in providing editorial comments while also creating writers who can address their own writing issues. These findings provoke further investigation and possible program changes that would create a clearer image of students' writing levels and their responsibility in becoming more effective writers. In doing so, students would more readily learn to apply the process of prewriting, writing, and rewriting.

Survey Statements 2 (It is important to think about the audience when writing a paper.), 5 (I consider the purpose of the paper when planning writing assignments.), and 9 (Writing a thesis statement is an important step in writing a strong paper.) focused on the rhetorical elements of effective writing. Overall, the results for these statements remained within the Agree or Strongly Agree level, findings that demonstrate a nominal understanding of the importance of considering audience and purpose as well as constructing a thesis statement in academic writing. The results indicated that students valued these elements of the rhetorical situation in a variety of writing scenarios. While constructing the composition survey, the researcher believed this question would reveal a limited understanding of the importance of thesis writing. However, these items demonstrated that students may, indeed, understand the importance of these rhetorical aspects of effective writing at the beginning of the semester. One explanation for this finding is that students chose Agree on the pre-test without a full understanding of the importance of thesis writing. Overall, these findings provided limited insight into whether students truly understood how considering these areas of effective writing should inform their writing.

Survey Statements 4 (Pre-Test: My English 1010/1011 course will prepare me for the writing that will be expected of me in college. Post-Test: My English 1010/1011 prepared me for

the writing expected of me in college.) and 14 (I expect my English 1010/1011 course content to help me with writing beyond college.) remained within the Agree or Strongly Agree levels.

While no significant differences were revealed, the findings indicated that participants believed the course content would help them with the ability to write in their collegiate writing and in other writing situations. These reflective observations could help students transfer what they learned in FYC to other collegiate writing scenarios. These relevant findings support the focus of the study in that students expected the course to prepare them and then believed it had.

Further investigation, such as a longitudinal study, could help the researcher determine the validity of the findings. After students enter their vocations, the researcher could conduct a follow-up survey and then interview students who indicated they believed FYC would help them in writing beyond college.

The mean scores of Survey Statements 7 (All English courses are the same.), 10 (I begin working on a paper as soon as I receive the assignment.), and 13 (I have difficulty meeting academic deadlines.) were found chiefly within the Disagree level. The finding for Statement 7 indicated that students chose not to generalize English courses, a constructive finding. If students consider the purpose of each English course separately, they may be more open-minded to learning rhetorical strategies and using them for other writing. Statement 10 can be interpreted in several relevant ways. Understanding the importance of early drafting is a vital element of the writing process and an academic habit of the mind. This area of self-efficacy is essential to writing effectively not only in FYC but also in other disciplines. This finding sheds light on the ubiquitous problems of product-oriented deliverables and procrastination and the effect these problems can have on writing in other disciplines. Statement 13 indicated students believed they met academic deadlines. The researcher, however, has observed a different

outcome: Students often struggle to produce acceptable drafts within the required deadline.

Perhaps the statement should have been stated in the following way: “I have difficulty producing an acceptable draft at the due date” (Focus group participant, personal communication, March 31, 2014). Another possible interpretation of the finding is that at the beginning of the semester students were unaware of their inability to produce acceptable drafts in a timely manner.

Overall, these questions addressed the concept that self-efficacy could support transfer of knowledge to other writing situations, a notion supported by the literature (Driscoll, 2011; Driscoll & Wells, 2012; Perkins & Salomon, 1992; Wardle, 2007, 2009).

Survey Statements 11 (It is important to outline or organize my paper before writing.) and 15 (I have used electronic databases for research.) remained within the Agree or Strongly Agree level overall. The paucity of difference indicated that students valued these rhetorical skills throughout the semester. Statement 11 fulfilled the preconceptions of the researcher; however, Statement 15 demonstrated an unforeseen finding. The researcher has observed that most first-year college students are not only inexperienced in finding relevant and reliable peer-reviewed articles for academic research but also unaware of the availability of academic databases. For this reason, the researcher has postulated that the incongruity in the findings might be explained by a misunderstanding of the term electronic databases. Students may have assumed the term referred to any electronic search engine, such as Google. This finding is relevant to composition instructors in that it underscores the importance of identifying academic databases. If students do, in fact, believe these pre-writing strategies of outlining and researching with databases are crucial to good writing, in theory, their writing in other courses will demonstrate clarity, coherence, and claims supported with evidence.

Focus Group Responses

The qualitative element of the study addressed Research Question 3 through the emerging theme of improvement in specific areas of proofreading and editing skills and its subthemes. Research Question 3 focused on the shift of students' ratings of their ability to transfer learning from the beginning to the end of the FYC course. Students pointed out that, at the end of the semester, they were concerned with

- “properly citing,”
- “catching grammatical errors like ROs [run-ons] and commas,”
- “using transitional phrases,”
- “finding mistakes,” and
- “taking out words that mean the same thing.”

The response “the course totally changed the way I edit and review papers” implied a whole-hearted transformation in attitude (Focus group participant, personal communication, March 31, 2014). One participant highlighted a self-awareness of the need for revision: “I found out that a lot more than what I thought was wrong with my writing was actually wrong with it” (Focus group participant, personal communication, March 31, 2014). This response may be interpreted as false appraisals caused by lack of awareness in the early part of the course. With more experience, these same students may have chosen different answers.

Research Question 4

Research Question 4 (Based on the reported major area of study, is there a difference in students' perceived ability to transfer knowledge from FYC to other courses and contexts?) was mapped to the survey statements that aligned with Transfer Perceptions (Survey Statements 3, 4,

12, and 14) and compared to student's reported major areas of study (see Table 3.1). Two ANOVA tests were conducted on the data: a pre-test and a post-test. The tests revealed no statistically significant differences in the pre-post comparison; however, the overall responses during the semester could help composition directors and instructors understand how a student's major may inform his or her ability to transfer learning. By comparing the indicated major to answers concerning how one would use information learned in FYC, the researcher may be able to make inferences concerning transfer. In addition, the focus group responses related to Research Question 4 clarified the findings of the quantitative data.

The pre-test results may suggest that students who had chosen business or a related field as their major believed they would use the knowledge gained in FYC more than those who majored in social sciences. Also, those who had not yet chosen a major believed they would use this knowledge more than those who were majoring in biology and related fields. Respondents in the fields of engineering and the humanities indicated a similar perspective concerning their ability to apply the knowledge gained in FYC.

The post-test results suggested that students who had chosen social sciences or a related field believed they would use the knowledge gained in FYC more than those who were undecided. In addition, biology majors and those in the health field believed they would use this knowledge more than students majoring in business and related fields. Those majoring in engineering and in the humanities, similar to the findings of the pre-test, believed they would rarely use the knowledge gained in FYC.

Although the data revealed no difference (no gain or loss) following FYC instruction, these statements addressed Research Question 4 in that they demonstrated how an indicated major may influence how one views the knowledge and skills taught in FYC. In addition, the

information could be used by composition instructors to help their students gain a keener understanding of the writing required in majors other than English—an insightful outcome. More research is needed in teaching students how to apply their knowledge of the writing process. The literature supports the notion that the academic habit of writing as a process encourages growth in self-efficacy, an awareness that could also support transference of knowledge to other writing situations (Bergmann & Zepernick, 2007; Downs & Wardle, 2007; Driscoll, 2011; Wardle, 2009).

In the qualitative element of the study, the emerging theme of preparation for collegiate and vocational writing and its subthemes revealed the areas of students' perceptions addressed in Research Question 4. This question focused on the relationship of students' expectations of writing in their major and their perceived ability to transfer knowledge to those situations. These perceptions were addressed when one student assessed the knowledge gained in FYC as “one of the valuable lessons I learned” (Focus group participant, personal communication, March 31, 2014). The student pointed out that this knowledge had been applied to the writing required as a theatre major, such as writing scripts. Another student tied the theme of preparation to writing required in history courses. One respondent connected FYC preparation gained to the realm of business, acknowledging that “professional emails” would be essential to building ethos (Focus group participant, personal communication, March 31, 2014). The expectations of using the knowledge and skills learned in FYC also supported Research Question 4.

Summary of Findings

The purpose of this study was to examine the perceptions of first-year college students concerning their writing ability and their ability to transfer those skills to other writing situations.

To inform this study, the researcher synthesized the transfer theories of Salomon and Perkins (1989), Wardle (2009), and Driscoll (2011), who concluded that more data should be collected in the area of teaching to transfer. While the overall findings of the study revealed few differences in perceptions from the beginning to the end of the semester, several statistically significant results were observed. One of the significant findings indicated that at the end of the semester students were more reticent about their ability to use the knowledge gained in FYC in their majors. Based on these perspectives, the researcher urges FYC instructors to focus more specifically on connecting the basic skills of effective writing (e.g., thesis writing, outlining and organization, rhetorical devices, sentence logic, clarity, coherence, and support) to the styles of writing required in various majors.

Comments recorded in the focus group sessions suggested that students with an enlightened self-awareness understood the need for revision (e.g., citing properly, detecting grammatical errors including run-ons and commas, using transitional phrases, and omitting wordiness). The literature supports the notion that self-awareness, or self-efficacy, may indicate an ability to identify writing strategies that can be used to improve writing in other contexts (Downs & Wardle, 2007; Driscoll, 2011; Fishman & Reiff, 2008; Mayer, 2002; Perkins & Salomon, 1992). Overall, students characterized their awareness of the conventions of academic discourse (use of pre-writing strategies and attention to audience and tone) as weak at the beginning of the semester. By the end of the semester, the qualitative results indicated that students felt more firmly that their FYC courses had prepared them for the writing that professors, other than English instructors, would require of them. By emphasizing diverse themes and perspectives, the focus group responses provided a broader interpretation of the quantitative portion of the study.

This study, while adding to the literature of learning transfer, engendered some unexpected yet constructive findings. The results, viewed together, indicated that students expected the course to be useful to them in their collegiate writing and in their writing beyond college. This study should inspire composition instructors to produce meaningful learning by using pedagogical methods focused on transfer. Given the rising costs of education, the difficulty of finding work in one's field after graduation, and the dearth of problem-solving skills, it is essential that students develop the ability to transform knowledge learned in one setting for use in other situations.

Conclusion of Findings

The study suggested several relevant uses of the composite findings as they relate to students' perceptions of their writing and transfer abilities. The qualitative data provided constructive insight to the quantitative data, which also enhanced the study's research questions. The data viewed together indicated several important connections between students' views of FYC and their ability to use or transform the knowledge they gained. These areas included thesis writing, outlining and organization, rhetorical devices, sentence logic, clarity, coherence, and support for claims.

Furthermore, the results of the data analysis revealed that learning transfer must be emphasized to create best practices of composition instruction, a finding that supports the literature. This finding does not imply that composition instructors can control how students view their FYC courses or how they will use the information learned in those courses. Instead, by implementing strategies that encourage self-efficacy, metacognition, and meta-awareness,

instructors could expect students to employ writing conventions that will facilitate collegiate writing.

The qualitative data suggested some important findings concerning students' perceptions throughout the semester. Data analysis related to the research questions yielded essential information concerning how students connected their awareness of the inability to use academic discourse at the beginning of the semester and their growth in this area by the end of the semester. One student's comment reflected this connection:

After the initial, the evaluation, paper at the beginning of the semester, when I got that back and I had a lot of errors, that set me up to want to do a whole lot better and learn the skills that I obviously did not have. (Focus group participant, personal communication, March 31, 2014)

The respondents' self-awareness of weaknesses in the use of academic discourse also emerged as an important implication for composition departments, instructors, and students.

During the focus group sessions, students indicated they viewed their FYC courses favorably. Several students articulated that FYC had prepared them for other genres of collegiate writing in which they believed the skills could be practiced: in history class, in the teacher program, in the World Civilization course, in the medical field, and to get higher grades. They rated highly their ability to use or transfer the knowledge learned in FYC to other writing situations, namely, writing scripts in theatre studies, writing research papers in English Composition II, and producing academic papers for history courses. These observations indicate an ability to adapt knowledge to different situations, an essential aspect of learning transfer. These findings add to the magnitude of the study, underscoring the connection between students' attitudes and their ability to transfer knowledge. Overall, the responses indicate that the FYC course laid a foundation for the academic and professional writing that will be expected of them.

One of the objectives of composition departments and writing instructors is to reinforce writing strategies students will intuitively use when they are asked to write in unfamiliar genres. Being aware of one's journey from the known to the unknown supports the notion of the transfer of learning. Perhaps the example that best captured the essential idea of learning transfer was a student's use of the adjectival "useful" to describe the knowledge gained in FYC. Emphasizing self-awareness, this study demonstrates how students perceive their abilities as writers and as students, their previous and current knowledge of writing, their expectations of the FYC course, and their expectations of writing in the future. The findings of both the quantitative and qualitative studies will add to the knowledge of the composition faculty as they determine how to continue to strengthen students' awareness of their own learning, a practice that will enable them to constructively use their knowledge in other domains.

Recommendations

The research findings, interpretations of data, and conclusions were the result of a detailed review of the quantitative and qualitative data sources. Based on the conclusions drawn from the completed research, the following recommendations are intended for future practice in the academy and for further research in composition pedagogy. The goal is to enhance composition programs by emphasizing learning transfer.

The results prompted the researcher to develop strategies to design a FYC course that better prepares students for writing in their majors. Outlined in the section Recommendations for Further Research in Composition Pedagogy, some of these strategies include holding students more accountable for a variety of writing genres that may be required in other courses and emphasizing assessment as it relates to learning transfer. A focus on students' attitudes and

dispositions toward the FYC course and instructor has also proven an indicator of student ability to transfer knowledge.

Recommendations for Further Practice in the Academy

Create a Follow-up Survey

The first recommendation is to create a follow-up survey to the Composition Surveys to further examine the concepts explored in this study. The importance of follow-up studies has been established in other composition studies (Downs & Wardle, 2007; Driscoll, 2011; Driscoll & Wells, 2012; Wardle, 2009). This supplemental survey could be administered to FYC students in subsequent semesters to discover data to support, clarify, or negate the information gathered with the original survey. These surveys would focus on aspects of learning transfer, writing abilities, reflective practices, and would include items such as “I feel I’ll be using what I’ve learned in 1010/1011 in other courses, in my profession, or in personal writing”; “My writing abilities have/have not changed”; and “I feel I’m a better writer after taking this course.” These statements could help students evaluate their own writing abilities and their perceptions of those abilities as emphasized by researchers in the field.

Offer Faculty Development on Learning Transfer

Another recommendation is to equip composition instructors with consistent and comprehensive information concerning this issue. Studies conducted by transfer scholars Perkins and Salomon (1992) supported the notion that reflection on one’s thinking processes, or metacognition, promotes transfer of skills. A discussion of these studies and related issues could help instructors understand their role in teaching the transfer process to students. Faculty

development workshops focusing on the transfer of knowledge could help instructors (both lecturers and adjunct instructors) implement this important concept. Although the onus of introducing the concept of learning transfer to students often falls on the shoulders of the FYC instructor, efforts to engage all stakeholders (i.e., administrators, instructors, and students) could produce a program that more successfully prepares students to transfer knowledge to other situations. If all relevant participants in the instructional process understand that transfer of knowledge is an expected outcome, students' perceptions of their ability to use what they learn in FYC may increase.

To support faculty development, a comprehensive annotated bibliography on transfer should be developed to provide resources for building courses with an emphasis on learning transfer. This resource would be vital to creating a coherent approach to teaching to transfer. Extensive reading on this often overlooked concept will help to build an academic community focused on the essential habit of the mind: transforming knowledge into useable forms.

Some educational researchers (Driscoll, 2011; Smit, 2007) have contended that limited knowledge is transferred from FYC courses to other courses and contexts; in fact, few empirical studies have demonstrated positive results of students' ratings of their ability to transfer. These findings provide further evidence that more investigation is required. If instructors gain more information in this area of academic thought, they may be more likely to build courses emphasizing self-efficacy and metacognition that will, in turn, encourage learning transfer in students.

Emphasize Self-Efficacy and Metacognition in Students

As discussed in Chapter II, departments and instructors must encourage students to reflect on their learning. Perkins and Salomon (1992) maintained that reflection on one's

thinking processes (i.e., metacognition) appears to promote transfer of skills. Students who reflect on their writing strategies, techniques, weaknesses, and strengths tend to apply their skills to other writing situations. Researchers have promoted composition instruction that emphasizes meta-awareness or intentional acts leading to more effective meaning-making (Beaufort, 2007; Driscoll, 2011; Wardle, 2009). This instruction might include encouraging students to use collaborative knowledge-building, reflective writing, and problem-solving activities. Research has shown that these skills can be “powerful ways of converting meaningful but inert knowledge into productive knowledge” (Bereiter & Scardamalia, 2010, p. 7).

Moreover, instructors who employ self-reflective practices themselves serve as models to students who may not have considered or have been equipped to use their skills for different writing assignments. Found throughout the literature and in the focus group responses collected for this study, students who viewed their FYC courses as useful for future disciplinary writing were motivated to exert effort initially, making the transfer of knowledge to other situations more successful (Bergmann & Zepernick, 2007; Downs & Wardle, 2007; Driscoll, 2011; Wardle, 2009). These findings support the recommendation to emphasize self-efficacy and metacognition in the FYC classroom.

Create Course Objectives that Assess Learning Transfer

To design composition courses and assignments that emphasize the benefits of the transference of learning, the curriculum committee should include the assessment of learning transfer in FYC learning outcomes. One of the objectives of composition departments should be to implement effective pedagogical methods that encourage the transfer of learning and skills acquired in FYC (Fishman & Reiff, 2008). The composition director and instructors must work

together to ensure that students receive instruction that necessarily equips them for writing throughout their college experience and beyond. To develop a more effective means of assessing writing transfer, the researcher could follow students into other writing domains to determine to what extent they use the skills learned in FYC. The writing produced in other learning situations would be assessed with the objectives set forth in FYC.

In addition, the development of departmental objectives that address learning transfer must be included in this effort. Insomuch as composition instructors are on the frontline of implementing learning transfer, the department must embrace a shared philosophy of the importance of transference. This crucial reinforcement must be considered by all members when creating or revising a program that emphasizes learning transfer. All stakeholders must have a firm understanding of the vision for the composition program and its influence on students.

Another challenge for the department and for FYC instructors is the lack of academic preparedness. Instructors are faced with students who have not yet acquired many of the basic writing skills they are expected to master to succeed in collegiate writing. This dilemma prompts instructors to create assignments that focus on basic skills to bring students to an acceptable level. Using qualitative data for his research, Fraizer (2010) concluded that “the development of students as academic writers may begin in FYC but is not completed there” (p. 51). It is a process that must establish an awareness of writing expectations and strategies through genre analysis and reflection. Fraizer (2010) noted another troublesome consideration: the readiness of FYC students for the complex activity of academic writing. Studies on the readiness of students have been inconclusive, an outcome that invites more investigation.

In addition, students may consider the writing emphasized in FYC as disconnected to the writing required in courses such as biology, history, or economics. Thus, FYC instructors are

challenged to prepare students for the writing required in courses within and outside students' majors. These challenges, though difficult, may better prepare students for the rigors of collegiate coursework as well as provide them with the practical skill of transforming attained knowledge into workable knowledge for other domains.

Recommendations for Further Research in Composition Pedagogy

Despite an increased interest by compositionists to measure the ability of students to transfer knowledge, limited empirical research has been conducted on the topic from the perspective of instructors. The study also revealed that additional research in learning transfer in the area of writing is needed. Several areas that could benefit from further research include an examination of data collected in a longitudinal study, an examination of data collected from a larger sample, an examination of assessment practices as they relate to learning transfer, and an examination of various demographic factors that may influence students' ability to transfer learning and writing ability.

As discussed in Chapter III, this study was limited to a time period of two semesters using a sequential mixed methods approach. If "Truth be the daughter of Time," as Bacon (1620/1994) posited, this research study could be expanded and enhanced by conducting a longitudinal study in which a number of participants would provide samples of writing required for subsequent courses. A more detailed study would examine these writing assignments to determine the degree to which students used in other writing situations the writing skills and knowledge acquired in FYC. While some of the theoretical and practical issues associated with longitudinal studies would need to be considered (Tuma & Hannan, 1984), longitudinal

strategies have been encouraged by some theorists to yield a more comprehensive dataset (Boruch & Pearson, 1988; Petersen, 1993).

In addition, the body of knowledge on learning transfer could benefit from a study conducted with a larger sample. Acquiring a smaller sample than desired must be noted when considering the findings of this study. The intended sample may not have been obtained for several reasons: only courses held in computer classrooms were included, instructors may have failed to emphasize the importance of the study, or students may have failed to understand the importance of the study. A future study that includes a larger sample of composition students could capture a more accurate sample, thereby making the study more generalizable.

Pedagogical assessment, as it relates to learning transfer, is another area that could benefit from additional research on this subject. The transfer theories of Salomon and Perkins (1989), Wardle (2009), and Driscoll (2011) could inform additional studies of the design of pedagogical and assessment practices in the field of composition. In this study, the composition surveys for Research Question 1 and for Research Question 3 revealed significant findings concerning writing abilities and learning transfer. The focus group responses revealed strong evidence of students' awareness of their writing abilities and learning transfer, often referring to how their instructors helped them make these connections. Some participants affirmed they felt more prepared for the challenges of writing for other courses when their instructors held them accountable for certain writing strategies. These responses indicated a relationship between students' perceptions of their ability to transfer knowledge and their instructors' emphasis on assessment as it relates to learning transfer. Because these results may be particular to this study's sample or may have been influenced by other factors, the data may be better understood with further research.

A final recommendation is based on the qualitative portion of this study, which used open-ended questions to gather more insight into students' perceptions of their abilities. This feature of data-gathering revealed other factors in need of additional research. First, a study is needed to focus on the preparation of students at the secondary level that may influence their ability to transfer learning to various areas at the college level. Future research could examine a sample of first-year college students' secondary-level writing experiences and to what extent previous writing experiences prepared them for collegiate writing.

Second, additional research related to this study could expand on the examination of students' attitudes and dispositions toward the course and the instructor. Perkins et al. (2000) described the term dispositions as qualities that determine how learners use and adapt their knowledge. Literature supports the importance of examining the impact of dispositions on the abilities of students. Beaufort (2007), Driscoll (2011), and Wardle (2009) have promoted composition instruction that emphasizes intentional acts leading to more effective meaning-making. This aspect of learning could provide an important extension to this study. Another factor that could reveal clarifying data on this topic is an investigation of demographic features, specifically gender and ethnicity. An examination of the possible relationship between respondents' gender or ethnicity to the ability to transfer knowledge could be a valuable extension of this research study.

Conclusion of the Study

Providing first-year composition students with the tools needed to succeed is the principal objective of university composition departments. The ability to use knowledge for various purposes has proven to be the sine qua non of the pursuit of academic habits of the mind.

Although studies in the field of learning transfer have been limited, this research study has reinforced the need for educators to help students develop the skill of transforming knowledge. Informed by the philosophical perspective of Vygotsky (1978), the study supported the notion that learners who acquire the transfer skills needed for learning can also achieve higher-level cognitive functions, namely conceptual thinking and problem-solving.

This study also revealed that the ability to transfer learning is intricately connected to collegiate and vocational writing, an important implication for understanding the relationship between knowledge management and reflective practice. An inspiring reflection emerged from a student comment illustrating the purpose of the study: “What I learned [in FYC] I will apply to the rest of my college life” (Focus group participant, personal communication, March 31, 2014). This thought has inspired the researcher to continue teaching with a focus on using knowledge in innovative ways.

In his eminent work *Novum Organum Scientiarum*, or New Instrument of Science, Sir Francis Bacon (1620/1994) outlined a novel way to explore the hindrances to human understanding—through empirical investigation. Bacon found that true science requires observation to prove or enhance a premise. Using these principles, the researcher strove to employ sound methodology to acquire a greater understanding of the transfer of learning. Because the study focused on the perceptions of learners, the researcher can now say with Bacon (1620/1994): “I mean to open up and lay down a new and certain pathway from the perceptions of the senses themselves to the mind.” As this study concludes, the researcher trusts the exploration of the pathway to knowledge transfer will yield both enlightening and meaningful turns in the road.

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APPENDIX A

INSTITUTIONAL REVIEW BOARD APPROVAL FORM

INFORMED CONSENT FORM FOR COMPOSITION SURVEYS

The University of Tennessee at Chattanooga

The Institutional Review Board

Dept. 4915 ~ 615 McCallie Avenue, Chattanooga, TN 37403-2598

Phone: 423.425.5867 Fax: 423.425.4052 instrb@utc.edu <http://www.utc.edu/rb>

MEMORANDUM

TO: Ms. Jill Beard **IRB # 13-108**
Dr. Susan North

FROM: Lindsay Pardue, Director of Research Integrity
Dr. Bart Weathington, IRB Committee Chair

DATE: September 3, 2013

SUBJECT: IRB # 13-108: Examining students personal evaluations of their ability to transfer knowledge learned in first-year composition to other writing contexts

The IRB Committee Chair has reviewed and approved your application and assigned you the IRB number listed above. You must include the following approval statement on research materials seen by participants and used in research reports:

<p><i>The Institutional Review Board of the University of Tennessee at Chattanooga (FWA00004149) has approved this research project # 13-108.</i></p>

Please remember that you must complete a Certification for Changes, Annual Review, or Project Termination/Completion Form when the project is completed or provide an annual report if the project takes over one year to complete. The IRB Committee will make every effort to remind you prior to your anniversary date; however, it is your responsibility to ensure that this additional step is satisfied.

Please remember to contact the IRB Committee immediately and submit a new project proposal for review if significant changes occur in your research design or in any instruments used in conducting the study. You should also contact the IRB Committee immediately if you encounter any adverse effects during your project that pose a risk to your subjects.

For any additional information, please consult our web page <http://www.utc.edu/irb> or email instrb@utc.edu

Best wishes for a successful research project.

INFORMED CONSENT FORM FOR COMPOSITION SURVEYS

26 August 2013

Dear Student,

My name is Jill Beard, and I am a lecturer in the Department of English Composition at the University of Tennessee at Chattanooga. I am conducting a research study on students' attitudes about their first-year composition (FYC) courses.

I am requesting your participation, which will involve a survey taken during the 1010/1011 class time. The survey should take no longer than 15 minutes. No time outside of class will be required.

Your participation in this study is voluntary. If you choose not to participate or to withdraw from the study at any time, your grade will not be affected. The results of the research study may be published, but your name will not be used. You may request to see the results of the study.

If you have any questions concerning the research study, please call me at 423.425.5641 or email me at jill-beard@utc.edu.

This research has been approved by the UTC Institutional Review Board (IRB). If you have any questions concerning the UTC IRB policies or procedures or your rights as a human subject, please contact Dr. Bart Weathington, IRB Committee Chair, at 423.425.4289 or email instrb@utc.edu.

Completion of the questionnaire will be considered your consent to participate. Thank you.

Sincerely,

Jill A. Beard
English Lecturer
UTC Department of English Composition
jill-beard@utc.edu
423.425.5641
Chattanooga, TN 37406

APPENDIX B

PRE- AND POST-SEMESTER SURVEY INSTRUMENTS

Rhetoric & Composition: Composition Survey – Beginning of Semester

Introduction ~ Directions: Please give the best answer to each question:

Student ID#: _____ Gender: (Circle one.) Male Female I prefer not to answer.

Major: _____ Year: (Circle one.) Freshman Sophomore Junior Senior

Is this your first time taking ENGL 1010/1011?: (Circle one.) Yes No

Is English your first language?: (Circle one.) Yes No

What grade do you expect to make in this course?: (Circle one.) A B C D F

Which of the following English courses did you take in high school?: (Check all that apply.)

____ English Composition ____ Advanced Placement Language ____ Advanced Placement Literature

____ British or American Literature ____ International Baccalaureate (IB) ____ Journalism

____ English as Second Language (ESL) ____ Dual Enrollment (Rhetoric & Composition)

What grade did you usually earn on your writing assignments in high school?: (Choose one.) A B C D F

Part I ~ Directions: After considering the following statements, mark the best answer for each.

1. I am a good writer.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>
2. I expect what I learn in my ENGL 1010/1011 course to help me with other courses.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>
3. It is important to think about the audience before writing a paper.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>
4. My ENGL 1010/ 1011 course will prepare me for college writing.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>
5. I consider the purpose of the paper when planning my writing assignments.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>
6. I enjoy writing.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>
7. All English courses are the same.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>
8. I expect my instructor to tell me where I need to revise.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>

Rhetoric & Composition: Composition Survey – Beginning of Semester

Introduction ~ Directions: Please give the best answer to each question:

Student ID#: _____ Gender: (Circle one.) Male Female I prefer not to answer.

Major: _____ Year: (Circle one.) Freshman Sophomore Junior Senior

Is this your first time taking ENGL 1010/1011?: (Circle one.) Yes No

Is English your first language?: (Circle one.) Yes No

What grade do you expect to make in this course?: (Circle one.) A B C D F

Which of the following English courses did you take in high school?: (Check all that apply.)

____ English Composition ____ Advanced Placement Language ____ Advanced Placement Literature

____ British or American Literature ____ International Baccalaureate (IB) ____ Journalism

____ English as Second Language (ESL) ____ Dual Enrollment (Rhetoric & Composition)

What grade did you usually earn on your writing assignments in high school?: (Choose one.) A B C D F

Part I ~ Directions: After considering the following statements, mark the best answer for each.

1. I am a good writer.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>
2. I expect what I learn in my ENGL 1010/1011 course to help me with other courses.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>
3. It is important to think about the audience before writing a paper.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>
4. My ENGL 1010/ 1011 course will prepare me for college writing.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>
5. I consider the purpose of the paper when planning my writing assignments.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>
6. I enjoy writing.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>
7. All English courses are the same.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>
8. I expect my instructor to tell me where I need to revise.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>
9. Writing a thesis statement is an important step in writing a strong paper.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>

10. I begin working on a paper as soon as I receive the assignment.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>
11. It is important to outline or organize my paper before writing.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>
12. I expect my ENGL 1010/1011 course to help me write in my major.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>
13. I have difficulty meeting academic deadlines.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>
14. I expect my ENGL 1010/1011 course content to help me with writing beyond college.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>
15. I have used electronic databases for research.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neutral</i>	<i>Agree</i>	<i>Strongly Agree</i>

Part II ~ Directions: Check one or all that apply.

A. My writing habits could be best described with the following statement: (Check one.)

- ☐ I work well under pressure and start the night before.
☐ I start early but do most of the work close to the deadline.
☐ I start early, break the assignment into segments, make a schedule, and follow it.
☐ I work on the assignment periodically from when it is assigned to the due date.
☐ I start early and finish early.

B. I tend to make the following errors in writing: (Check all that apply.)

- ☐ using the wrong word (example: *their* for *there*)
☐ left out or misplaced commas
☐ left out or misplaced apostrophes
☐ joining sentences incorrectly
☐ using quotes without introducing them with my own sentences
☐ using incomplete sentences
☐ misspelling
☐ using pronouns improperly (example: using *they* when *he* or *she* should be used)
☐ failing to give proper credit to borrowed sources
☐ failing to match subjects to their verbs
☐ other errors - In the box below, please list any other errors you commonly make.

C. I use the following prewriting strategies to plan my major writing assignments: (Check all that apply.)

- ☐ writing an introduction
☐ asking questions to discover ideas
☐ developing a thesis

- ☐ brainstorming: listing, outlining
- ☐ talking about my ideas with peers
- ☐ talking about my ideas with professors
- ☐ free writing (writing quickly without correcting)
- ☐ thinking about my audience
- ☐ thinking about the purpose of the writing
- ☐ creating research questions
- ☐ I have never tried any of these strategies.
- ☐ other prewriting strategies - In the box below, please list any other prewriting strategies you commonly use when writing papers.

- D. I make substantial changes to the following areas when revising or editing my writing assignments: (Check all that apply.)
- ☐ research (add new sources, check citation format and bibliography)
 - ☐ content (my own ideas, support for my points, examining points)
 - ☐ organization (paragraph order, section order, using transitions such as first of all, however, in fact)
 - ☐ word choice, vocabulary
 - ☐ grammar, capitalization, spelling, formatting, punctuation
 - ☐ I rarely revise my drafts.
 - ☐ other changes - In the box below, please list any other areas you might consider when revising or editing your paper.

- E. I have used the following writing strategies in my writing for other classes: (Check all that apply.)
- ☐ considering audience (Who will be reading the paper?)
 - ☐ considering the purpose of the writing (Why am I writing the paper?)
 - ☐ receiving feedback from classmates during in-class paper reviews
 - ☐ revising each draft of my paper
 - ☐ including an introduction & conclusion
 - ☐ using examples, details, or reasons to develop the main points
 - ☐ choosing a suitable way to organize my paper
 - ☐ considering how to connect my ideas using transitions such as *in addition*, *on the other hand*, *in fact*, *in conclusion*
 - ☐ considering what I have learned about steps that build an effective paper
 - ☐ other writing strategies - In the box below, please list any other writing strategies you commonly use when writing for other classes.

Rhetoric & Composition: Composition Survey – End of Semester

Student ID#: _____

Gender: (Circle one.) Male Female

Major: _____

Year: (Circle one.) Freshman Sophomore Junior Senior

Part I ~ Directions: After considering the following statements, mark the best answer for each.

1. I am a good writer.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Disagree Nor Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>
2. What I have learned in my ENGL 1010/1011 course has helped me with other courses.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Disagree Nor Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>
3. It is important to think about the audience before writing a paper.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Disagree Nor Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>
4. My ENGL 1010/ 1011 course has prepared me for college writing.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Disagree Nor Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>
5. I consider the purpose of the paper when planning my writing assignments.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Disagree Nor Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>
6. I enjoy writing.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Disagree Nor Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>
7. All English courses are the same.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Disagree Nor Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>
8. I expect my instructor to tell me where I need to revise.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Disagree Nor Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>
9. Writing a thesis statement is an important step in writing a strong paper.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Disagree Nor Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>
10. I begin working on a paper as soon as I receive the assignment.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Disagree Nor Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>
11. It is important to outline or organize my paper before writing.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Disagree Nor Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>
12. My ENGL 1010/1011 course taught me how to write in my major.	<i>Strongly Disagree</i>	<i>Disagree</i>	<i>Neither Disagree Nor Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>
13. I have difficulty meeting academic deadlines.	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neither Disagree Nor Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>

14. I expect my ENGL 1010/1011 course content to help me with writing beyond college.	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neither Disagree Nor Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>
15. I have used electronic databases for research.	<i>Strongly disagree</i>	<i>Disagree</i>	<i>Neither Disagree Nor Agree</i>	<i>Agree</i>	<i>Strongly Agree</i>

Part II ~ Directions: Check one or all that apply.

A. My writing habits could be best described with the following statement: (Check one.)

- ☐ I work well under pressure and start the night before.
- ☐ I start early but do most of the work close to the deadline.
- ☐ I start early, break the assignment into segments, make a schedule, and follow it.
- ☐ I work on the assignment periodically from when it is assigned to the due date.
- ☐ I start early and finish early.

B. I tend to make the following errors in writing: (Check all that apply.)

- ☐ use of wrong word (example: *their* for *there*)
- ☐ left out or misplaced commas
- ☐ left out or misplaced apostrophes
- ☐ joining sentence incorrectly
- ☐ using quotes without introducing them with my own sentences
- ☐ using incomplete sentences
- ☐ misspellings
- ☐ using pronouns improperly (example: using *they* when *he* or *she* should be used)
- ☐ failing to give proper credit to sources you've used
- ☐ failing to match subjects to their verbs
- ☐ other errors – In the box below, please list any other errors you commonly make.

C. I use the following prewriting strategies to plan my major writing assignments: (Check all that apply.)

- ☐ writing an introduction
- ☐ asking questions to discover ideas
- ☐ developing a thesis
- ☐ brainstorming: listing, outlining
- ☐ talking about my ideas with peers
- ☐ talking about my ideas with professors
- ☐ free writing (writing quickly without correcting)
- ☐ thinking about my audience
- ☐ thinking about the purpose of the writing
- ☐ creating research questions
- ☐ I have never tried any of these strategies.
- ☐ other prewriting strategies – In the box below, please list any other prewriting strategies you commonly use when writing papers.

D. I make substantial changes to the following areas when revising or editing my writing assignments: (Check all that apply.)

- ☐ research (add new sources, check citation format and bibliography)
- ☐ content (my own ideas, support for my points, examining points)
- ☐ organization (paragraph order, section order, transitions such as *first of all, however, in fact*)
- ☐ word choice, vocabulary
- ☐ grammar, capitalization, formatting, spelling, punctuation
- ☐ I rarely revise my drafts.
- ☐ other changes – In the box below, list any other areas you might consider when revising or editing your paper.

E. I have used the following writing strategies learned in this class in writing for other classes: (Check all that apply.)

- ☐ considering audience (Who will be reading the paper?)
- ☐ considering purpose of the writing (Why am I writing the paper?)
- ☐ receiving feedback from classmates during in-class paper reviews
- ☐ revising each draft of my paper
- ☐ including an introduction & conclusion
- ☐ using examples, details, or reasons to develop the main points
- ☐ choosing a suitable way to organize my paper
- ☐ considering how to connect my ideas using transitions such as *in addition, on the other hand, in fact, in conclusion*
- ☐ considering what I have learned about the steps that build an effective paper
- ☐ other writing strategies – In the box below, please list any other writing strategies you commonly use when writing papers for other classes.

APPENDIX C

INSTRUCTIONS FOR INTERVIEWERS, INFORMED CONSENT FORM, AND
FOCUS GROUP QUESTIONNAIRE

Spring Semester 2014
Regional University
Interviewer: Faculty Member
Interviewee: Second-semester composition student

Instructions for Interviewers:

Note-Taking. Taking regular and detailed notes of observable behaviors and verbal responses during each interview is crucial. Notes will reduce the burden on the interviewer to remember details about the interviewees.

Additionally, these notes should:

- Summarize the content and delivery of respondents' answers.
- Document the candidate's grammar, body language, and other non-verbal factors.
- Help interviewers focus on pertinent information during the interview.

Interviewer's Non-Verbal Behavior. An interviewer's body language such as facial expressions and body movements (e.g., nodding, raising eyebrows, frowning) communicates to the candidate. For example, the interviewer communicates boredom by slouching, regularly looking at the clock, leaning back, or doodling with a pen.

Interviewers need be aware of their body language to avoid communicating negative impressions. Additionally, while taking notes, interviewers should make periodic eye contact with the candidate to show their interest and to provide opportunities to observe the candidate's non-verbal behavior.

The Interview Setting. The interview should take place in a comfortable environment.

- Interviews should be held in a quiet, non-threatening, and private place.
- Seating arrangements should be the same for all candidates.
- The interview room and facilities must be accessible to candidates with disabilities.
- There should be a separate area for those waiting to be interviewed.
- Individuals who have been interviewed should not be allowed to communicate with those waiting to be interviewed.
- Interviews should be scheduled far enough in advance to provide adequate preparation time for the interviewer.
- All candidates should be allotted the same amount of interview time.

(taken from *Structured interviews: A practical guide*, 2008).

Informed Consent Form for Focus Group Research

24 February 2014

Study Title: EXAMINING STUDENTS' PERSONAL EVALUATIONS OF THEIR ABILITY TO TRANSFER KNOWLEDGE LEARNED IN FIRST-YEAR COMPOSITION TO OTHER WRITING CONTEXTS

You are invited to participate in a research study on how students perceive their ability to use writing skills learned in the first-year composition course in other situations. You have been asked to take part in this study because you completed the pre- and post-semester Composition Survey.

My name is Jill Beard, a candidate in the *Doctorate of Education in Learning and Leadership* at the University of Tennessee at Chattanooga, and I will be conducting the study. Participation in this study is voluntary. Compensation will consist of refreshments provided at the focus group meeting room.

If you agree to participate, you will be part of a focus group, which involves answering open-ended questions. The focus group will consist of other first-year composition students who participated in the Composition Survey. The discussion will last approximately 30 minutes.

The focus group will be audio-recorded in order to accurately capture what is said. If you participate in the study, you may request that the recording be paused at any time. You may choose how much or how little you want to speak during the group. You may also choose to leave the focus group at any time.

Participating in this study may not benefit you directly, but it will help us learn more about the perceptions of students concerning their ability to transfer knowledge learned in first-year composition to other courses and situations. We do not foresee any significant risks related to participation in this study. Participants may feel some pressure to reveal feelings or experiences to the group. If participants share their experiences with colleagues and peers, they may also feel vulnerable during or after the group.

The information you will share with us if you participate in this study will be kept confidential. Participants will be asked not to use any names during the focus group discussion. Reports of study findings will not include any identifying information. Audio-recordings of the focus groups will be kept on a password-protected computer in Jill Beard's locked office. After the focus group recordings are transcribed, the recordings will be destroyed. The typed transcription will be kept on the password-protected computer. Any printed copies will be kept in a locked file cabinet in Jill Beard's locked office. Only Dr. Susan North, Chair of the Composition Department at UTC and Jill Beard will be able to listen to the recordings or read the typed version of the recordings.

If you have any questions about this study, please contact Jill A. Beard at 423.504.6434 or at jill-beard@utc.edu. If you have questions about your rights as a research participant, please contact Dr. Bart Weathington, IRB Committee Chair, at 423.425.4289 or email instrb@utc.edu.

Your signature on this consent form indicates your agreement to participate in this study. You will be given a copy of this form to keep, whether you agree to participate or not. The second signed consent form will be kept by the researcher.

Before the focus group discussion begins, please answer the following:

1. I am 18 years of age or older. ____ yes ____ no
2. What is your gender? ____ male ____ female
3. What is your major? _____
4. Why did you choose UTC over other colleges/universities? _____

I have read the consent form, and all of my questions about the study have been answered. I understand that the focus group will be recorded. I understand that my name will not be connected to my answers. I agree to participate in this study.

Print name: _____

Signature: _____

Date: _____

Focus Group Questions

Instructions to participants: Please answer the following questions honestly. Feel free to add details or examples you feel would further explain your answer. Although the interview will be audiotaped, your identity will not be revealed or connected in any way to your comments.

Ground Rules:

- Your ideas are important. Do not hesitate to add to the discussion.
- There are no right or wrong answers.
- You may choose not to answer a question.
- You do not have to speak in any particular order.
- You may agree or disagree with other participants.
- Please do not discuss the comments of other participants outside the focus group.

Do you have any questions? Let's begin.

1. At the beginning of the semester, what writing skills did you expect to learn in 1010/1011/1020?
2. At the end of the semester, did you feel that you had learned the writing skills you expected to?
3. Do you expect the writing skills you learned in 1010/1011/1020 to help you with writing in your area of study or program major?
4. Do you expect the skills you learned in 1010/1011/1020 to help you with professional writing?
5. How important is it to know the rules of writing to be successful in college?
6. What writing habits did you acquire as a result of 1010/1011/1020?
7. When you think about writing in a career or other pursuits after college, what writing skills do you think will be the most important?
8. Please describe a learning experience from 1010/1011/1020 that has prepared you for success in college-level writing.

9. Please describe a learning experience from 1010/1011/1020 that has prepared you for success in writing beyond college?
10. Is there anything you can tell me about how to make this course more valuable to you as you continue your university studies or as you see yourself entering your profession?

Thank you for your willingness to help with this research project.

APPENDIX D

DESCRIPTION OF SURVEY RESPONSES 16-20

Survey Statements 16-20 of the pre- and post-semester composition surveys were used to provide categories of skills and characteristics of academic writing students believed they had acquired at the beginning and end of the semester. The data were used primarily for the Composition Department study; however, the findings did provide extant data to support the findings of the researcher's study.

The following table records the percentages of responses to the pre- and post-semester composition survey *Statement 16: My writing habits could be best described with the following statement.*

Percentages of Responses to Pre- and Post-Semester Composition Survey Part II: *Statement 16 My writing habits could be best described with the following statement:*

S#	Statement	Percentage of Responses	
		Pre-Semester	Post-Semester
1	I work well under pressure and start the night before.	12.56	12.82
2	I start early, but do most of the work close to the deadline.	46.73	49.23
3	I start early, break the assignment into segments, make a schedule and follow it.	8.54	10.77
4	I work on the assignment periodically from when it was assigned to the due date.	25.63	23.08
5	I start early and finish early.	6.53	4.10

Analysis of Data in Previous Table

Overall, the pre- and post-semester responses to Statement 16 were similar. No outliers are evident. The most interesting statistic was demonstrated by *Statement 2: I start early, but do most of the work close to the deadline*: 47% at the beginning of the semester and 49% at the end. If writing instructors emphasize writing as a process, this number should be reduced by the end

of the semester. This statistic could prove disappointing to composition instructors whose courses were represented with this study. By the end of the semester, only 11% of students recorded that they followed the process of Statement 4. This statistic may help instructors to design their writing courses to focus more on the process and planning of writing.

The following table records the percentages of responses to the pre- and post-semester composition survey *Statement 17: I tend to make the following errors in writing*. Several moderate differences in students' perceptions are demonstrated in these questions from the beginning to the end of the semester. No outliers were observed.

Percentages of Responses to Pre- and Post-Semester Composition Survey Part I:
Statement 17 I tend to make the following errors in writing:

S#	Statement	Percentage of Responses	
		Pre-Semester	Post-Semester
1	using the wrong word (example: <i>their</i> for <i>there</i>)	10.26	16.50
2	left out or misplaced commas	58.97	58.29
3	left out or misplaced apostrophes	18.46	11.76
4	joining sentences incorrectly	29.23	20.32
5	using quotes without introducing them with my own sentences	17.44	18.18
6	using incomplete sentences	4.62	9.93
7	misspellings	25.64	26.20
8	using pronouns improperly (example: using <i>they</i> when <i>he</i> or <i>she</i> should be used)	18.46	14.97
9	failing to give proper credit to borrowed sources	27.18	18.18
10	failing to match subjects to their verbs	12.31	5.88
11	other errors (recorded in box)	9.23	16.04

Note: See Appendix E for list of other errors recorded in box.

Analysis of Data in Previous Table

The previous table indicates that more students believed they tended to make the errors of using the wrong word, using incomplete sentences, and other errors at the end of the semester. Students believed their errors in leaving out or misplacing apostrophes, joining sentences incorrectly, using pronouns improperly, failing to give proper credit to borrowed sources, and failing to match subjects to their verbs significantly decreased by the end of the semester. The responses of “left out or misplaced commas” and “misspellings” showed no difference from the beginning to the end. A larger percentage of responses at the end of the semester might indicate a stronger understanding of the error itself. A student who is unaware that s/he uses “there” for “their” might not indicate this issue as an error.

The most significant findings were recorded in *S11: Other errors*. Several students wrote responses that had been mentioned in the question itself. Although students had the choice of *S4: Joining sentences incorrectly*, several students wrote “run-ons” in both the pre- and post-test. “Incorrect use of commas” was written in the box twice as well. In the pre-test, students wrote “arrangement of words” and “awkward sentences” as two of the other errors. “Sometimes I misplace words or confuse my sentences carelessly” is an observation by a student at the beginning of the semester. Several comments referred to focus and organization: going “off topic,” “not knowing what to write,” and “writing about the wrong subject.”

Several responses specifically referred to usage, such as the pronoun issues of “using ‘that’ and ‘it’” and “use of you,” “passive voice,” and “fragments.” Some of the answers generally referred to “grammar,” “not knowing what to write,” and “context.” The issue of “citation errors” was mentioned once in the pre-test but not in the post-test, indicating perhaps that students felt more confident in their ability to cite properly by the end of the semester.

The comment “knowing how to write certain types of papers” might pique the interest of compositionists who emphasize the importance of learning a variety of writing genres and purposes. Also on the post-test, students recorded “repetition” and “redundancy” five times and “wordiness” twice, demonstrating a keen awareness of this writing issue.

The following table demonstrates the percentages of responses to the pre- and post-semester composition survey *Statement 18: I use the following prewriting strategies to plan my major writing assignments*. Several moderate, as well as some substantial, differences in students’ perceptions are demonstrated in these questions from the beginning to the end of the semester. *S11: I have never tried any of these strategies* was the outlier with a response of only 2%.

Percentages of Responses to Pre- and Post-Semester Composition Survey Part II

Statement 18 I use the following prewriting strategies to plan my major writing assignments:

S#	Statement	Percentage of Responses	
		Pre-Semester	Post-Semester
1	writing an introduction	64.32	66.84
2	asking questions to discover ideas	30.65	31.61
3	developing a controlling idea (thesis)	60.30	55.96
4	brainstorming (listing, outlining)	70.85	65.80
5	talking about my ideas with peers	28.64	30.05
6	talking about my ideas with professors	19.60	21.24
7	free writing (writing quickly without correcting)	47.74	37.31
8	thinking about who will read my paper (audience)	49.25	49.22
9	thinking about why I am writing the paper (purpose)	65.83	52.33
10	creating research questions	15.58	19.17
11	I have never tried any of these strategies.	2.01	1.55
12	other prewriting strategies (recorded in the box)	1.01	1.55

Note: See Appendix E for the list of other prewriting strategies recorded in box.

Analysis of Data in Previous Table

While some statements showed little or no difference by the end of the semester, several statements provided significant findings. More students wrote an introduction (67%) and created research questions (19%). Both of these categories increased by 3%. However, it was disappointing to find that fewer students said they free wrote at the end of the semester: 48% fell to 37 %. The number of students who considered the purpose decreased from 66% to 52 percent. These findings provide important data for the English department and composition instructors.

The pre-semester survey response written in the box for *S12: Other prewriting strategies* was “using a thesaurus. . .provoked me to write.” The same student went on to compare using a thesaurus to a “spider web” that took him from “one point to the next.” While this comparison is descriptive, the student seemed to be unclear as to what a “prewriting strategy” was even though several examples had been provided. This comment might prompt composition instructors to review the concept of prewriting strategies more carefully.

Two post-semester responses demonstrated an understanding of prewriting strategies, including “writing an outline” and “thinking about historical events to tie into the paper.” The comment “writing a conclusion” was an outlier.

The following table demonstrates the percentages of responses to the pre- and post-semester composition survey *Statement 19: I make substantial changes to the following areas when revising or editing drafts of my writing assignments*. Several moderate differences in students' perceptions are demonstrated in these questions from the beginning to the end of the semester. *S6: I rarely revise my drafts* could be considered an outlier with 6% of responses.

Percentages of Responses to Pre- and Post-Semester Composition Survey Part II

Statement 19 I make substantial changes to the following areas when revising or editing drafts of my writing assignments.

S#	Statement	Percentage of Responses	
		Pre-Semester	Post-Semester
1	research (add new sources, check citation format and bibliography)	36.41	41.45
2	content (my own ideas, support for my points, making judgments about points)	71.28	62.69
3	organization (paragraph order, section order, use of transitions such as first of all, however, in fact)	61.03	58.03
4	word choice, vocabulary	76.92	73.06
5	grammar, capitalization, formatting, spelling, punctuation	70.77	69.43
6	I rarely revise my drafts.	5.64	6.74
7	other changes (recorded in the box)	0.51	0.52

Note: See Appendix E for list of other changes recorded in box.

Analysis of Data in Previous Table

Overall, the data collected in the previous table were interesting, but not surprising. Six percent of students indicated that “I rarely revise my drafts.” The answer “grammar, capitalization, etc.” hovered at 70% while “organization” scored 60%. Most significantly,

“content” fell from 71% at the beginning of the semester to 63% at the end. Revision of research rose from 36% to 41%. The single comment written on the pre-test was “improving the flow of sentences.” On the post-test, S7 scored 1%, but no comments were recorded.

The following table demonstrates the percentages of responses to the pre- and post-semester composition survey *Statement 20: I have used the following writing strategies in my writing for other classes*. Several substantial differences in students’ perceptions are demonstrated in these questions from the beginning to the end of the semester.

Percentages of Responses to Pre- and Post-Semester Composition Survey Part II
Statement 20 I have used the following writing strategies in my writing for other classes:

S#	Statement	Percentage of Responses	
		Pre-Semester	Post-Semester
1	considering audience (Who will be reading the paper?)	56.60	72.40
2	considering the purpose (Why am I writing the paper?)	70.71	78.65
3	receiving feedback from classmate during in-class paper reviews	44.98	40.10
4	revising each draft of my paper	61.62	59.38
5	including an introduction and conclusion	69.70	69.79
6	using examples, details, or reasons to develop the main points	71.21	64.06
7	choosing a suitable way to organize my paper	46.46	48.96
8	considering how to connect my ideas using transitions such as in addition, on the other hand, in fact, in conclusion	58.08	49.48
9	considering what I have learned about the steps needed to build an effective paper	32.83	35.94
10	other writing strategies (recorded in the box)	1.01	0.52

Note: See Appendix E for list of other errors recorded in box.

Analysis of Data Recorded in Previous Table

Statement 20 is particularly important to this study because it focuses on the use of writing strategies in other courses. Meaningful findings include *S1: Considering audience*. With an impressive increase of 15 percentage points—57% to 72%, this statistic is one of the most encouraging in the study. However, *S6: Using examples, details, or reasons to develop the main points* fell from 71% to 64%. This finding is notable in that fewer students believed they used these basic elements of development in other writing situations. *S2: Considering purpose* moved from 71% to 79%—a considerable difference of perception. *S8: Considering how to connect my ideas using transitions* showed a marked decline from pre- to post-test: 58% to 49 percent. This shift indicates that fewer students felt they had used the organizational tool of transitions in other writing situations.

The comments for *S10: Other writing strategies* were limited: one comment for the pre-test and one for the post-test. Writing instructors might find the pre-test comment interesting in that the student viewed a writing strategy as “receiving feedback from instructor.” At the end of the semester, one student recorded her perceptions in this way: “I don’t really write in any of my other classes unless it is for a test.” While this information could be taken as an indictment on other university departments, these data could also inform how writing instructors design their composition courses to meet the needs of the university.

APPENDIX E

RESPONSES TO “OTHER” BOXES ON SURVEY STATEMENTS 17-20

The first element of qualitative data for the departmental study was collected with Statements 17-20 on the composition surveys. The departmental study provided extant data which the researcher examined for this study. Statements 17-20 provided respondents a list of varying responses with the instructions: “Mark all that apply.” The last option on each list was “Other.” A write-in box was provided for respondents to include additional responses. These data were recorded with no corrections to the spelling or grammar and compiled in Appendix A. The comments were then described and analyzed while also determining significant findings and outliers.

The following information is a collection of the actual participant responses to the open-ended questions posed in the pre- and post-semester Composition Survey Statements 17-20. If a response was given by more than one respondent, a number in parentheses indicates the number of times the same response was given. The following responses have been recorded the way the students wrote them. No changes or corrections have been made to spelling, grammar, or style.

Pre- and Post-Semester Responses to S17 *I tend to make the following errors in writing: Other errors:*

Pre-Semester Responses

*arrangement of words / sometimes I misplace words
or confuse my sentences carelessly / Awkward sentences*

passive voice

not finishing thought; awkward word choice

Write about the wrong subject

leaving out words

Subject Verb agreement as well as word choice

misunderstanding some information

Using “that” and “it” in sentences where they dont belong

*citation errors; knowing how to write certain types of papers
incorrect use of commas (2)*

off topic

context

time change

run-ons (2)

leaving out hyphens

Post-Semester Responses

using you

*repetition / repeat the same word over
and over again / Repition / Redundancy /
repeating myself (5)*

*wordiness / adding unnecessary words /
I am not concise enough (6)*

tense change (2)

word choice / word usage

organization

fragments (2)

run-ons (2)

grammar

not knowing what to write

Responses to S18 *I use the following prewriting strategies to plan my major writing assignments:
Other prewriting strategies:*

Pre-Semester Responses

*Using a thesaurus to find words provokes me
to write. Such as a spider web, one point to the next.*

Post-Semester Responses

Writing an outline

*I often think about historical events to tie into
the paper, such as events similar to what I am
am writing about or support my claims.*

Writing a conclusion

Responses to S19 *I make substantial changes to the following areas when revising or editing drafts of my writing assignments: Other changes:*

Pre-Semester Responses

Post-Semester Responses

improving the flow of sentences

no comments available

Responses to S20 *I have used the following writing strategies in my writing for other classes: Other writing strategies:*

Pre-Semester Responses

Post-Semester Responses

receiving feedback from instructor

I don't really write in any of my other classes unless it is for a test.

APPENDIX F

DESCRIPTIVE ANALYSIS OF EMERGING THEMES FOUND IN QUALITATIVE DATA

Theme 1: A growing awareness of the conventions of academic discourse

A growing awareness of the conventions of academic discourse was a theme revealed by respondents as they shared several specific examples of what they had learned in FYC: “proper” writing or judging the worth of one’s writing, use of grammar, awareness of one’s voice, and awareness of audience. When students were asked what they thought the overall purpose of the FYC course was, the terms “proper” and “writing” tended to be used together. A growing awareness of “learning proper college-level writing” and “the proper way of creating a college-level paper” suggests a relationship between what they learned in FYC and what they believe they will need to know for future writing assignments.

One respondent described a new awareness of academic discourse after taking the course: “I found out that a lot more than what I thought was wrong with my writing was actually wrong with it.” Several students echoed that they had often thought their writing was “good,” but it was really “bad.” Another student commented on this misconception: “Once I went back and read it through, I’m like, it sounds very choppy.”

Several respondents used the imagery of battle to describe their perception of the writing process: “I would always use a lot of repetitive words . . . That was another challenge I had to conquer in the class.” This inward struggle to write well is illustrated in another comment:

I know one thing. I didn’t notice it at first, but in every other sentence I always used the word “always” and like, when, No! not this word again, and I’d have to constantly tell myself: Don’t use that word! Don’t put it down no matter how many times you want to. Just leave it out!

When asked what writing skills they learned in FYC they will need after college, the participants pointed to pre-writing strategies. They described pre-writing as “writing an outline for my papers,” “considering the audience,” and “putting more work in my thesis statements.” One participant stated: “I write in steps: prewriting and outlines.”

Other considerations were “writing for an academic audience” and “making sure I’m putting my own voice into it.” The issue of tone was tied closely to the awareness of audience: “Your tone of voice when you write. You can turn people off when you write.” The phrase “turn people off” is a colloquial term describing an awareness of the rhetorical concept of audience awareness.

One student demonstrated his awareness of his inability to use academic discourse at the beginning of the semester and his growth in this area by the end of the semester: “After the initial, the evaluation, paper at the beginning of the semester, when I got that back and I had a lot of errors, that set me up to want to do a whole lot better and learn the skills that I obviously did not have.”

Theme 2: Preparation for collegiate and vocational writing

The notion that FYC had prepared students for other types of collegiate writing and for writing beyond college was evident in many of the comments. This theme was revealed through student statements that rated their ability to use or transfer the knowledge learned in FYC in other writing situations.

One student acknowledged that FYC helped while “working on my research paper in English Comp II.” The participant went on to explain: “A lot of what you taught me is really helpful for what I’m doing now because we’re learning the TTA (which is making the claim, putting the example, with analysis of it).” This student rated the knowledge gained in FYC as “one of the valuable lessons I learned.” Another respondent connected what had been learned to work in theatre: “If I had to create a script, I learned how to use more vivid words.” The student felt he would be able to apply what he had learned to “the rest of my college life.” This

respondent also connected a life lesson (time management) to the course: “Even if you don’t learn something directly in English Comp, you can take the time management from it and be able to use it in your other courses.” This student also believed connections could be made between what one learns in FYC to the writing that will be required in vocational work such as a business memo. Noting an important aspect of writing effectively, the student asserted that one needs to be “able to write a writer’s memo for business if you’re a manager making sure you’re properly sending out an email and being professional about it.”

One respondent associated what had been learned in FYC to other classes and situations: “I’ve already used it [knowledge from FYC] in my history class. Even last semester before I had left Comp I, I was employing a lot of the tools to get higher grades.” Another student credited FYC for success in entering the education program: “Yes, I’ve used some of the tools that I learned in writing my papers to be let in to the teacher program here at UTC.” Discussion among the respondents led to the comment: “It’s funny how you actually use it.” The students openly laughed at this remark. Several students noted how professors, other than English instructors, would point out grammar issues in papers. One student burst out: “They’ll correct your commas and say you’re too wordy—which I wasn’t expecting!” The respondent went on to admit: “I will definitely use it [knowledge learned in FYC] a lot in history courses.” All the students in the focus group nodded when one student indicated: “It is important to know the rules of writing, so when we write for other classes, you can use it for those papers and not just for English.”

Another subtheme associated with the idea of preparation was that of gaining confidence as a writer. As indicated in Chapter Three of this study, self-efficacy is an important aspect of transferring knowledge to other situations. One student noted:

I felt my writing improved significantly because I hadn't had a composition course since sixth grade, so coming into this I was nervous, but at the end of it, my writing was a lot better, and I'm more confident as a writer now.

When a student commented: "I did not have to write any essays this semester at all," the other students shook their heads in disbelief. The discussion then took a definite turn when another student asserted: "I have already begun using it [knowledge learned in FYC], within, not only in the classes for my major, but for other electives as well." Several other comments supported this point-of-view:

In other classes outside my English course, the skills I learned in Comp I definitely help now.

Yeah. It doesn't just help in my English classes; it helps when I have to write a paper for World Civ, and going into a business major, I'm going to have to write a lot more papers. So I'm sure it will help me in the future too.

Another thread that could be pulled throughout the sessions was the imagery of construction or building seen in the assertions: "It just set up a foundation for my writing" and "a foundation for professional writing." Several students noted that many professors, regardless of the courses they teach, expect "proper" writing:

Yes, in my World Civ class, when he [the professor] grades papers, a big portion of the grade comes from how you worded your sentences. And if you had . . . too wordy of sentences, he takes off a lot of points on that.

This observation makes an important connection to the concept of learning transfer in that the respondent ties what was learned in FYC (word choice and conciseness) to what was expected in a course outside of FYC.

One student compared learning the process of writing to the work required in archeology: "Another thing, we would have to go and look up the research. That's what I have to do for archeology, and, I'm like, I know how to do this now!" The use of "then/now" indicated a time-oriented perception of abilities before taking FYC and after taking FYC (Bernard & Ryan, 2010).

It is important to note that, while these findings have proven interesting, they reflect the views of a relatively small number of FYC students. Most of the participants were students who showed positive engagement with their FYC course. A larger sample of participants would have strengthened the findings and given perhaps more diversity of themes and points-of-view.

Theme 3: Improvement in specific areas of proofreading and editing skills (logical transitioning, correcting run-ons, choosing the appropriate word, citing sources properly, and conciseness)

How students rate their ability to proofread and then edit their writing is a theme students associated with the knowledge they gained in their FYC courses. One student summed up the skills learned in the FYC course in this way:

It totally changed the way I edit and review papers. Like today, I sat down and spent an hour and a half editing an English paper that, I mean, if that had been my senior year of high school, I would have just turned it in and got the minimum.

In Focus Group 3, one student tied proofreading to peer-reviewing, an activity that is emphasized in FYC: “I proofread my papers a lot more and a lot closer, and the peer reviews definitely helped with that.” Similarly, another student emphasized the importance of peer-reviewing for course work outside of the English classroom. The respondent had this advice for the audience: “Definitely, proofreading, peer-review—even if it’s not necessary to the class—still get someone to look over it.”

Several students indicated that honesty was an important characteristic of writers who wanted to improve as proofreaders and editors. One student emphasized the attitude of an effective reviewer:

Because it’s always good to have other people telling you. You have to accept it and also give it to others, and if you don’t like it, you have to say it. You can’t just be, like, it’s good and then it really isn’t.

One respondent indicated that helping students with their writing could be required by professors other than English instructors: “Even if I’m not an English teacher—I’m going to need to be able to correct my students’ writing, and I think I learned a lot about proofreading. Going forward it definitely will carry over.”

Another subtheme one student identified was logical transitioning, an important skill that should be focused on when proofreading: “I make sure [my writing] makes sense and my transitions—make sure they flow with each other.”

Correcting run-on sentences was another area of proofreading and editing that several students mentioned. One student from Focus Group 1 indicated a time-oriented relationship (Bernard & Ryan, 2010) by pointing out how some important improvements in correcting run-ons and comma errors had been made by the end of the semester:

I know, for me, I had a real bad time with grammatical errors like ROs [run-ons] and commas. Towards the end, towards my last paper, I started to catch them and realize them a lot better and just be able to . . . take out this comma or make this, like, a complete sentence.

One student noted that the World Civilization professor “took off a lot of points if you had run-on sentences,” a comment that may indicate that skills learned in FYC have to be transferred to other writing contexts.

Appropriate word choice or writing for an academic audience was identified as an important skill learned in FYC. Several students pointed out that choosing the appropriate uses of “*affect/effect*,” “*there/their*,” and “*then/than*” was a skill they had learned in their FYC courses. Another subtheme associated with editing and proofing is citing sources properly. One student asserted: “I learned how to properly cite, like, you can’t just drop in quotes.”

Conciseness, a skill emphasized in FYC, was a subtheme that participants in Focus Group 3 identified as a “big problem.” One commented: “I’ve never had a teacher point out that

I was wordy, [smile] so that's drastically reduced because that was pointed out during Comp I."

Another student agreed: "I'm definitely not as wordy as I was before." One participant

connected what he had learned in FYC to another course: "In my history class, we have to read a paper and write two to four sentences on there and we had to kind of, like, condense it and make it, like, precise and not add, like, any of the extra fluff." One comment emphasized the important role peer-reviewing plays in helping writers reflect on their own writing: "They just pretty much just bled all over it . . . basically it was because of my wordiness, and after that I . . . thought about, 'All right, is this too wordy?'" He "considered" the markings and then began to edit and revise.

Composition instructors stress that to proofread and edit more effectively, one must understand how to accomplish that goal. The following student observation outlines a contingent relation (Bernard & Ryan, 2010) between printing text and becoming a stronger editor:

Printing off what you, like, wrote because if you see it on the screen, it's, like, sometimes I just miss things, . . . and five minutes later I read over it again, and I, like, okay, this is crap and this is good. I can find, like, mistakes, like, easier.

In sum, the assertion that "I learned a lot more than they thought they would learn" supports both the Research Questions and the purpose of this study.

APPENDIX G

DESCRIPTIVE ANALYSIS OF RESULTS FOR t -TESTS FOR PAIRED SAMPLES

Paired samples *t*-tests were used to determine how students' perceptions of what they learned in FYC indicated differences from the pre- to the post-semester tests. The following table presents the outcomes of these tests on Survey Statements 1-15: the pre- and post-test degrees of freedom, *t*-test values, *p* values, and level of significance. By conventional standards, three of the pre- and post-test comparisons could be considered significant.

Pre- and Post-Test Degrees of Freedom, *t*-Test Values, *p* Values, and Level of Significance

Survey Statement	<i>df</i>	<i>T</i>	<i>p</i>	sig.
S1	106	-0.847	0.399	
S2	106	-1.092	0.277	
S3	106	3.576	0.001	* / **
S4	106	1.858	0.066	
S5	106	-0.768	0.444	
S6	106	0	1.000	
S7	106	-1.763	0.081	
S8	106	0.767	0.445	
S9	106	-0.313	0.755	
S10	106	0.522	0.603	
S11	106	-1.421	0.158	
S12	106	5.298	0.000	* / **
S13	106	-2.341	0.021	*
S14	106	1.318	0.190	
S15	106	-1.295	.198	

APPENDIX H

DESCRIPTIVE ANALYSIS OF RESPONSES FOR PRE- AND

POST-TEST SURVEY STATEMENTS 1-15

The following table demonstrates the percentages of responses to Composition Survey Statements 1-15 administered at the beginning of the semester. These results indicate a measurement of students' perceptions in the following areas: how they feel about their ability as a writer and as a student, what they already know about writing, and what they expect to learn in the FYC course.

Percentage of Responses to Pre-Semester Composition Survey Statements 1-15

Survey Statements	Percentage of Responses				
	Strongly Disagree	Disagree	Neither Disagree Nor Agree	Agree	Strongly Agree
S1 I am a good writer.	0.50	10.50	27.64	56.28	5.53
S2 It is important to think about the audience when writing a paper.	0.00	0.50	3.00	49.50	47.00
S3 I expect what I learn about writing strategies in my ENGL 101/1011 course to help me with writing in other courses.	0.00	0.50	2.49	41.79	55.22
S4 My ENGL 1010/1011 course will prepare me for the writing that will be expected of me in college.	0.00	0.00	3.02	44.22	52.76
S5 I consider the purpose of the paper when planning writing assignments.	0.00	1.50	8.00	60.00	30.50
S6 I enjoy writing.	8.08	21.21	39.39	25.25	6.06
S7 All English courses are the same.	10.00	61.00	20.00	7.50	1.50
S8 I expect my instructor to tell me where I need to revise.	0.00	3.50	16.00	54.00	26.50
S9 Writing a thesis statement is an important step in writing a strong paper.	0.00	0.50	8.00	43.00	48.50
S10 I begin working on a paper as soon as I receive the assignment.	3.50	29.50	34.00	27.50	5.50
S11 It is important to outline or organize my paper before writing.	1.50	10.00	19.50	49.50	20.00
S12 I expect my ENGL 1010/1011 course to help me write in my major.	0.50	4.50	17.50	51.00	26.50
S13 I have difficulty meeting academic deadlines.	16.50	56.50	18.00	7.50	1.50
S14 I expect my ENGL 1010/1011 course content to help me with writing beyond college.	0.00	0.00	11.11	61.11	27.78
S15 I have used electronic databases for research.	0.50	1.50	4.50	59.50	34.00

The following table records the percentages of responses to Survey Statements 1-15 administered at the end of the semester. These results indicate a measurement of students' perceptions of the knowledge and skills they believed they gained in 1010/1011. While the majority of the statements were phrased identically to the pre-semester survey, several statements on the post-semester survey (S2, S4, S12 specifically) were phrased in the past tense to capture perceptions of students as they reflected on the semester.

Percentages of Responses to Post-semester Composition Survey Statements 1-15

Survey Statements	Percentage of Responses				
	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
S1 I am a good writer.	1.03	9.74	21.54	59.49	8.21
S2 It is important to think about the audience when writing a paper.	1.03	0.52	5.67	45.88	46.91
S3 I expect what I learn about writing strategies in my ENGL 101/1011 course to help me with writing in other courses.	0.00	0.50	2.49	41.79	55.22
S4 My ENGL 1010/1011 course has prepared me for the writing that will be expected of me in college.	1.03	0.52	5.67	45.88	46.91
S5 I consider the purpose of the paper when planning writing assignments.	1.03	1.55	6.70	50.52	40.21
S6 I enjoy writing.	9.74	18.46	35.90	26.67	9.23
S7 All English courses are the same.	9.74	62.56	20.10	5.64	1.54
S8 I expect my instructor to tell me where I need to revise.	0.00	3.09	20.10	51.55	25.26
S9 Writing a thesis statement is an important step in writing a strong paper.	0.00	1.03	5.15	45.88	47.94
S10 I begin working on a paper as soon as I receive the assignment.	4.62	32.82	28.72	28.72	5.13
S11 It is important to outline or organize my paper before writing.	1.04	9.38	13.02	58.85	17.71
S12 My ENGL 1010/1011 course taught me how to write in my major.	2.58	10.82	40.72	37.11	8.76
S13 I have difficulty meeting academic deadlines.	19.69	49.74	18.00	7.50	1.50
S14 I expect my ENGL 1010/1011 course content to help me with writing beyond college.	0.52	2.07	9.84	62.18	25.39
S15 I have used electronic databases for research.	0.52	0.00	2.58	59.79	37.11

Descriptive Analysis of Pre- and Post-Semester Survey Responses (Statements 1-15)

The data presented in the previous table show the mean scores for the separate iterations from pre-semester to post-semester. At the beginning of the semester, 62% of students agreed or strongly agreed with *Statement 1: I am a good writer*. That percentage grew to 68% by the end of the semester. Students showed an 8% growth in their perception of *Statement 6: I enjoy writing*: 31% at the beginning of the semester and 39% at end.

Little difference in attitude was demonstrated on *Statement 8: I expect my instructor to tell me where I need to revise*. At the beginning of the semester, 81% of students agreed and strongly agreed that their instructors would supply revision information while, at the end of the semester, 77% agreed and strongly agreed that the instructor should supply this information. In addition, *Statement 10: I begin working on a paper as soon as I receive the assignment* yielded these statistics: the pre-test data showed 30% of students disagreed with this statement while the post-test indicated a small increase of disagreement (33%).

Differences in students' perceptions from pre-test to post-test was demonstrated in *Statement 11: It is important to outline or organize my paper before writing*. In the pre-test, 70% agreed or strongly agreed with this statement. In the post-test, the number grew to 77% who agreed or strongly agreed. Another difference was demonstrated in *Statement 12: I expect my ENGL 1101/1011 course to help me write in my major*. In the pre-test, 18% of participants indicated they neither agreed nor disagreed with this statement; the post-test their ambivalence grew to 41 percent. The percentage of students who agreed and strongly agreed that the course would help them write in their majors revealed a difference from the beginning to the end: A rate of 78% at the beginning of the semester fell to the rate of 46% at the end of the semester.

APPENDIX I

TRIANGULATION MATRIX MAPPING RESEARCH QUESTIONS WITH
SURVEY STATEMENTS AND FOCUS GROUP QUESTIONS

Triangulation Matrix Mapping Research Questions with Survey Statements and Focus Group Questions

Research Questions	Survey Statements (paired <i>t</i> - tests were used to analyze Group I & Group II statements)	Focus Group Questions (descriptive analysis was used to analyze)
1. What is the relationship between students' judgments about their writing and their perceived ability to use those strategies?	<p>Group I:</p> <p>1. I am a good writer. 5. I consider the purpose of the paper. 6. I enjoy writing. 10. I begin working when assignments are given.</p> <p>Group II:</p> <p>3. I expect what I learn about writing strategies in my ENGL 1010/1011 course to help me with writing other courses.</p> <p>4. My ENGL 1011/1011 course will prepare me for writing that will be expected of me in college.</p> <p>12. I expect my ENGL 1010/1011 course to help me writing in my major.</p> <p>14. I expect my ENGL 1010/1011 course content to help me with writing beyond college.</p>	<p>4. Do you expect skills learned in FYC to help with professional writing?</p> <p>5. How important is it to know the rules of writing in your college writing?</p> <p>6. What are some of the important habits of writing learned in 1010/1011?</p> <p>8. Name a learning experience that has prepared you for college writing.</p> <p>9. Name a learning experience that has prepared you for writing beyond college.</p> <p>10. What would make the course more valuable to you?</p>
2. How do first-year students rate their ability to transfer knowledge about writing from the FYC course to other courses and contexts?	<p>3. I expect what I learn about writing strategies in my ENGL 1010/1011 course to help me with writing in other courses.</p> <p>4. My ENGL 1010/1011 course will prepare me for the writing that will be expected of me in college.</p> <p>12. I expect what I learn in my 1010/1011 course to help me write in my major.</p> <p>14. I expect my ENGL 1010/1011 course content to help me with writing beyond college.</p>	<p>4. Do you expect to use skills learned in FYC to help with professional writing?</p> <p>5. How important is it to know the rules of writing in your college writing?</p> <p>7. What are the most important skills for college and beyond?</p> <p>8. Name a learning experience that has prepared you for college writing.</p>

		<p>9. Name a learning experience that has prepared you for writing beyond college.</p> <p>10. What would make the course more valuable to you?</p>
<p>3. How do students' ratings of their ability to transfer learning change from the beginning to the end of the course (one semester)? And, in what direction?</p>	<p>Survey Statements 1-15 will be used to answer this question.</p>	<p>1. What writing skills did you expect to learn?</p> <p>2. What writing skills did you learn?</p> <p>3. What writing habits did you acquire?</p>
<p>4. Based on their reported major areas of study, is there a difference in students' perceived ability to transfer writing knowledge from FYC to other courses and contexts?</p>	<p>3. I expect what I learn about writing strategies in my ENGL 1010/1011 course to help me with writing in other courses.</p> <p>4. My ENGL 1010/1011 course will prepare me for the writing that will be expected of me in college.</p> <p>12. I expect my ENGL 1010/1011 course will prepare me for the writing that will be expected of me in college.</p> <p>14. I expect my ENGL 1010/1011 course content to help me with writing beyond college.</p>	<p>3. Do you expect to use the skills learned in FYC to help you in your course of study?</p> <p>4. Do you expect to use the skills used in FYC to help you in your professional writing?</p> <p>5. Do you feel it is important to know the habits of writing?</p>

APPENDIX J

DESCRIPTIVE ANALYSIS OF RESULTS FOR EFFECT SIZE TABLE

The following table demonstrates the two-tailed effect size of the pre- and post-test means with the standard deviations for two independent samples of equal size.

Cohen's d Effect Size Computation on Survey Statements 3, 12, and 13

Survey Statement	Pre-Test Mean	Post-Test Mean	Pre-Test SD	Post-Test SD	Effect Size (d)
3	4.58	4.31	0.55	0.68	0.44
12	3.94	3.42	0.90	0.85	0.59
13	2.07	2.28	0.82	0.95	0.24

APPENDIX K
CONTINGENCY TABLE DETERMINING FREQUENCIES
OF STUDENTS' FINAL GRADES

To determine if there were any statistical differences in the student expectations between pre- and post-tests, frequency distribution tables were constructed. Based on these data, a contingency table was built to indicate the pre-test n , post-test n , and final grade n as well as the column percentages. Because of the level of the cell frequencies, the parameters for the chi-square test of independence were not met in this case (Creswell, 2009).

Contingency Table Indicating Pre-Test n , Post-test n , and Final Grade n and Column Percentages

Test or Measure	Grades					Total
	A	B	C	D	F	
Pre-test n (column %)	66 (63.0%)	37 (35.2%)	2 (2.0%)	0 (0.0%)	0 (0.0%)	105
Post-test n (column %)	37 (35.2%)	58 (55.2%)	10 (10.0%)	0 (0.0%)	0 (0.0%)	105
Final Grade n (column %)	37 (35.2%)	46 (44.0%)	15 (14.3%)	7 (7.0%)	0 (0.0%)	105

APPENDIX L

ADDITIONAL DATA USED IN DEPARTMENTAL STUDY

Description of Results for Grade Expectations and Final Grades Earned

The data indicating students' expectations of their final grades for their FYC courses demonstrated several findings. The following table indicates the percentage of responses for expectations for final course grades recorded at the beginning and end of the semester. The table also includes the percentage of final grades students earned at the end of the semester.

Percentage of Responses of Grade Expectations and Final Grades of Students who Completed Pre- and Post-Tests

Grade Expected	Pre-Semester Responses	Post-Semester Responses	Final Grade for Course
A	63.68	45.13	35.51
B	34.33	44.10	42.99
C	1.99	9.74	7.64
D	0.00	0.51	11.89
F	0.00	0.51	0.00

The previous table indicates that the percentage of students who expected to earn an A at the beginning of the semester (63.68%) was larger than the percentage of students who expected to earn an A at the end of the semester (45.13%). In the end, 35.51% of students received an A for the course. While this percentage varies greatly from the 63.68% of students who indicated they would earn an A on the pre-test, it is only 9% less than the students who believed they would earn an A on the post-test. Expectations of receiving a B increased from 34.33% at the beginning to 44.10% at the end of the semester, approximately the same percentage who earned a B (42.99%) at the end of the semester. Expectations of receiving a C shifted from 1.99% pre-semester to 9.74% post-semester, comparable to the percentage who earned a C (7.64%) for the course. On the pre-test, no students believed they would earn a D or F in the course; by the end

of the semester, only .51% of students believed they would earn a D. Ultimately, 11.89% of students earned a D in the course, and 0.00% earned an F.

VITA

Jill grew up in the farming community of Crawford County, Ohio. Life on the farm with her older brother and cousins included a variety of activities: climbing in the hay mow, getting caught in the corn crib, running from cantankerous rams and hogs, gathering rocks from the corn fields, and raising her pig Wilbur and her sheep Lambkins. Through these years, she learned that true education requires getting your hands dirty.

In 1982 while attending college in Oklahoma, Jill met her future husband, a history and political science major. Their first teaching positions focused on instructing middle- and secondary-level students in Douglasville, Georgia. After their children were born, Jill chose to take a hiatus from teaching. The family then moved to North Georgia where she earned the Master of Arts in Literary Studies at the University of Tennessee at Chattanooga (UTC). During this time, they built their “home on the hill,” where they continue to reside.

Jill began instructing students in composition and literature at a private university in 1999. Throughout these years, she cultivated friendships with colleagues and students by sitting together at lunch to discuss a multitude of topics. She was also known for providing Christmas wassail and barbequed water chestnuts at departmental get-togethers. Jill and her husband have enjoyed travelling to England and France on several occasions. Yet, some of their most cherished memories are of Friday night football games. As Jill watched from the bleachers, her son played, her daughter cheered, and her husband coached the team to a regional championship.

In the fall of 2008, Jill was appointed to an English lectureship at UTC. Two years later, she began to pursue a doctorate, encouraged by the lives of her family. Her husband, an entrepreneur, built his own local business; her son, a combat-decorated Marine, served as an infantryman in Operation Enduring Freedom (OEF) during one of the deadliest summers of the war in Afghanistan; her daughter, who taught for several months in the Dominican Republic, presently teaches sixth-grade social studies at a local charter school. Their strength of mind and character has inspired Jill to press on through the pain of loss.

In the coming years, she will continue to challenge her students to become more informed thinkers and more effective writers by transferring what they learn to new domains of knowledge. Instructing those who aspire to be teachers would also provide an opportunity to transfer her love of learning.